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ABSTRACT

A study assessed the success of Job Training Partnership Act (JTPA) programs by examining current approaches, featuring operational and experimentally based measures, all using the individual as the unit observation. The research used Program Year 1990 JTPA termination and associated program participation records in Illinois and Texas. Two principal measures of success were used: 155% of poverty (application of a factor of 1.55 to federally defined poverty income levels) and strict-steady employment (continuous employment, potentially with several employers). Participation patterns reflected the national policy shift toward more intensive longer-term services. The share of terminees continuously employed increased from 25 to 28 percent in Illinois from the first to the second postprogram year, but was roughly constant in Texas at about 35 percent; earnings success rates rose in both states. Longer-term program success rates were consistently higher for males, adults, whites, those with greater educational attainment, and those receiving no public assistance at enrollment. Two variables had the most pronounced and statistically significant effects on rates of success: prior work and earnings and securing a full-time job at termination from JTPA. Field interviews indicated that constrained choice and empowered counselors were associated with successful programs. (Appendixes include data tables and detailed regressions results for Illinois and Texas; and additional results for Texas adjusted for family status and size. Contains 49 references. (YLB)

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JTPA SUCCESS STORIES IN TEXAS AND ILLINOIS: The Who, How and What of Successful Outcomes

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Chapter I—JTPA SUCCESS STORIES: Synthesis and Policy Implications

A. Overview

1. Gauging the Success of Training

When the first net impact evaluation report on Job Training Partnership Act (JTPA) participants was released by the U.S. Department of Labor in early 1993, in many respects it seemed to confirm what policymakers and researchers had suspected or known for some time: while program participation yields net positive impacts on employment and earnings for some (e.g., white, non-AFDC women), for many others (e.g., youth and ex-offenders) participation is far less productive (Bloom et al. 1993). Other federal and state training program evaluations have produced broadly similar results (e.g., Barnow 1987; and Gueron and Pauly 1991). Such findings indicate the need for learning more about the nature of the successes from the nation's job training programs, an exercise which does not require elaborate experimental designs.[1]

With the advent of Unemployment Insurance (UI) wage records archives in some states, it is now possible to answer questions about whom JTPA has been serving successfully—i.e., producing *longer-term* increases in employment and earnings and economic self-sufficiency in terms of gross, postprogram levels of employment and earnings.[2] It is also possible to determine how they have been attaining these levels in terms of activities and services they received and their postprogram employment and earnings paths.

The approach used in this research is characterized schematically in Figure 1.1. First, researchers established a conceptual framework for gauging program success. This entailed an examination of current approaches, featuring operational measures (such as employment rates, wages and earnings levels) and experimentally-based measures (such as net increases in employment and earnings for assignees and enrollees), all using the individual as the unit of observation. It also examined important alternatives (e.g., economic self-sufficiency) envisioned in the original JTPA legislation which relied implicitly on the family as the unit of analysis.

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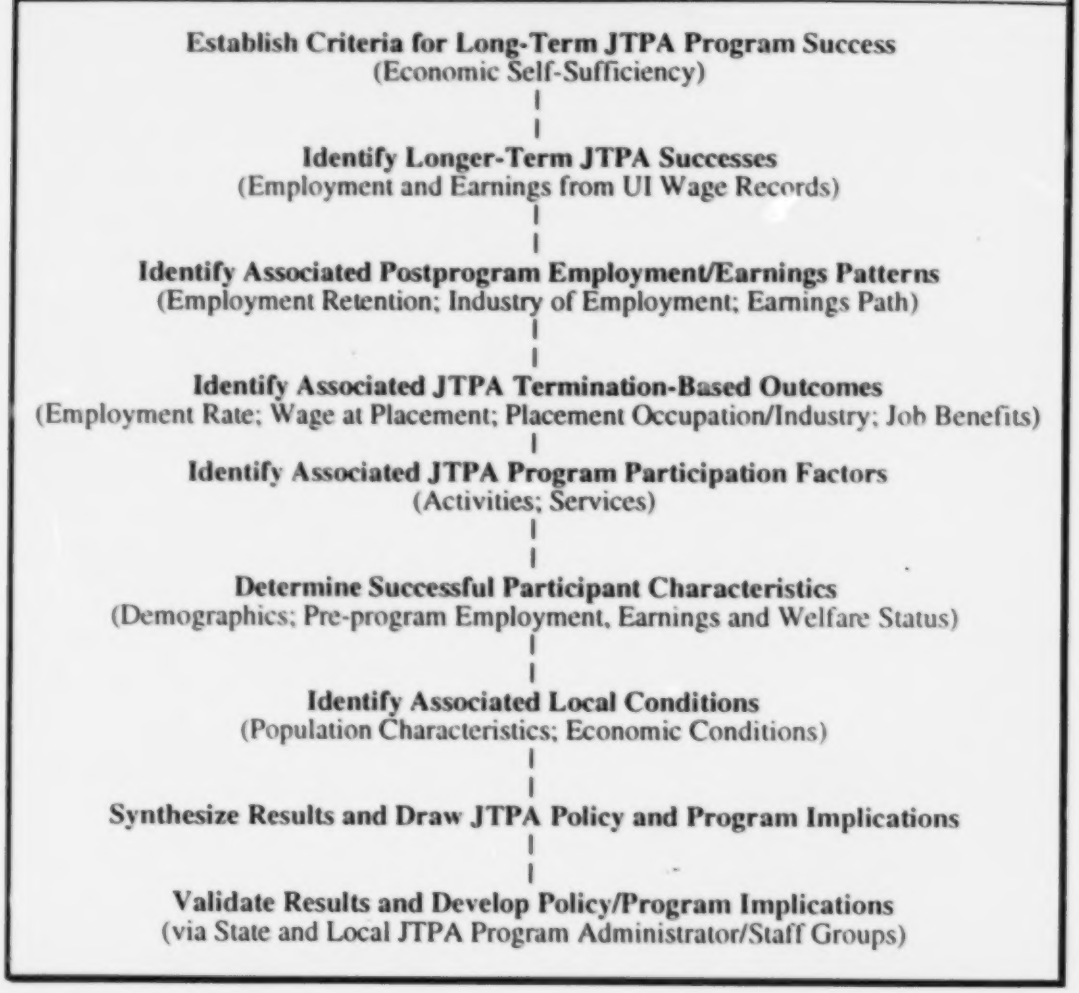
[1]The recent interchange between Burtless and Heckman and Smith on the value of social experiments in the *Journal of Economic Perspectives* (Spring 1995) is worth noting in this regard.

[2]Several recent reports published by the Northeast/Midwest Institute (1989) and the National Commission for Employment Policy (1991, 1992) provide more information on UI wage records, their content and potential uses.

Figure 1.1—Schematic Representation of JTPA Success Stories Research


Establish Criteria for Long-Term JTPA Program Success
(Economic Self-Sufficiency)
Identify Longer-Term JTPA Successes
(Employment and Earnings from UI Wage Records)
Identify Associated Postprogram Employment/Earnings Patterns
(Employment Retention; Industry of Employment; Earnings Path)
Identify Associated JTPA Termination-Based Outcomes
(Employment Rate; Wage at Placement; Placement Occupation/Industry; Job Benefits)
Identify Associated JTPA Program Participation Factors
(Activities; Services)
Determine Successful Participant Characteristics
(Demographics; Pre-program Employment, Earnings and Welfare Status)
Identify Associated Local Conditions
(Population Characteristics; Economic Conditions)
Synthesize Results and Draw JTPA Policy and Program Implications
Validate Results and Develop Policy/Program Implications
(via State and Local JTPA Program Administrator/Staff Groups)

The concept and measurement of economic self-sufficiency have changed over time (Schwarz and Volgy 1992). Recent work has explored this concept in different contexts, the University of Texas at Austin's Center for the Study of Human Resources (1993) in terms of successful exits from Texas' Aid to Families with Dependent Children (AFDC) program, and Northern Illinois University's Center for Governmental Studies (1993) in the context of "making work pay" in Chicago. Ellwood (1988) also examined "making work pay", a phrase which became one of the guiding principles of the Clinton Administration's welfare reform initiative which Ellwood co-directed. Economic self-sufficiency has also been JTPA's explicit long-term mission.

This research has utilized Program Year (PY) 1990 JTPA Title IIA termination and associated program participation records matched to longer-term UI employment and earnings records in two of the nation's most populous states, Illinois and Texas.[3] Instead of pursuing the research from the entering participant's point of view, as with most experimental and quasi-experimental evaluations, it has begun with outcomes. That is, *given* successful employment and earnings outcomes measured variously, who attained them, what jobs (occupations) were they initially placed in and in which industries, which JTPA activities and services did they receive and for how long, what were the labor market conditions they encountered and in what service delivery areas did they occur?

Subsequent field work was also conducted with selected local JTPA programs which were found to be associated with these successes, as well as discussions with knowledgeable state JTPA staff, in order to validate and ferret out programmatic explanations for the results and to draw out important policy implications.

2. Measures of Program Success

It is one thing for participation in a job training program to be associated with net impacts on employment and/or earnings relative to a control group (e.g., Bloom et al. 1993) or a carefully drawn comparison group of nonparticipants (e.g., Bowman 1993; King et al. 1994). It is another for such a program to be designated a "winner" in terms of meeting or exceeding its program performance standards, numerical targets established by the Secretary of Labor and typically adjusted further by governors (Barnow 1988). Net program impacts on earnings, estimated several years after participation, typically range from negative and large to modestly positive, while most local JTPA programs have been awarded cash incentives each year for meeting or exceeding their outcomes-based standards. But, neither of these mechanisms for evaluating program performance addresses the issue of whether participation has led to a successful result for the participants and their families, whether immediately or over the longer run. Doing so requires establishing a conceptual framework, associated measures and criteria for gauging "success".

Measures of participant success and associated criteria must be established a priori. While several measures of success were considered, two principal measures were selected for use in this analysis, as follows:

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[3]JTPA's program year runs from July through June of each year; PY 1990 began on July 1, 1990.

• ***155 % of poverty***, a measure based on Schwarz and Volgys' (1992) economic self-sufficiency concept. This measure essentially applies a factor of 1.55 to each of the existing federally defined poverty income levels, and thus, varies by family size; and

• ***Strict-steady employment***, that is, continuous employment, potentially with several different employers, where an employment quarter is defined as one with UI-covered earnings greater than or equal to working 20 hours each week in the quarter at the federal minimum wage.[4]

These measures were analyzed over two postprogram timeframes, i.e., the first and second full years following program termination. Earlier research has focused on such measures as earning above the federal poverty level or simple employment retention (Romero 1995). Note that emphasis here is on two measures of success which are more difficult to achieve: 155 percent of poverty and strict-steady employment. Annual patterns are emphasized.[5]

3. Key Research Questions

This research has addressed a number of key research questions, as follows:

1. Who are JTPA's longer-term "successes"—those who either earned above 155 percent of federally defined poverty earnings or were continuously employed in the two postprogram years—in terms of their demographic characteristics, family status, etc.? And, how do they differ from the non-successes?
2. Are JTPA's postprogram successes also its *pre*-program successes? What is the role of pre-program work and earnings in producing longer-term "successes"?
3. What activities and services did these JTPA successes participate in? And, how were these different from the non-successes?
4. What types of jobs did JTPA successes secure in terms of occupation, industry, starting wages and benefits? How did these differ for non-successes?
5. What postprogram employment and earnings paths did successes follow, in terms of employment status changes and earnings? How were their paths different from those for non-successes?
6. What influence did local economic and population conditions have on JTPA's longer-term successes?

[4]This measure mimics the latest employment definitions being used in the national JTPA performance standards (USDOL 1994).

[5]Success on the earnings measures was further analyzed by family status (Texas only) and family size (Illinois and Texas).

4. Brief State Profiles

Illinois and Texas, the study states, are two of the most populous in the country, ranking 6th and 3rd respectively in 1990. They share many similar characteristics but also reflect important differences as well. Illinois' population of around 11.6 million in 1990 was approximately 78 percent White, 15 percent Black and only 8 percent of Hispanic Origin. Texas' population totaled nearly 17 million in 1990, of whom 61 percent White, 12 percent Black and 26 percent Hispanic (nearly all of whom were Mexican-American). In terms of years of education completed, the Illinois population was slightly better educated than Texas'; around 76 percent of Illinois' adult residents had at least a high school education, compared to 72 percent of Texans.

While both states are highly urbanized—about 83-84 percent of their population residing in metropolitan statistical areas (MSAs)—their distributions were markedly different. The Illinois portion of the Chicago MSA accounted for about two-thirds of all Illinois residents and almost four of every five of its MSA dwellers; the Dallas, Houston and San Antonio MSAs, containing three of the nation's ten largest cities, accounted for just over half of the Texas population. While Illinois outside the Chicago area is predominately rural, Texas features many other MSAs as well as vast rural areas; fully 152 of the state's 254 counties have a population density of fewer than 25 persons/mile.

Illinois and Texas faced relatively comparable labor market situations during this timeframe, whether expressed in terms unemployment rates, employment/population ratios, or the share of employment in key sectors and industries. A higher share of nonfarm employment in Illinois was in manufacturing than in Texas.

Compared to Texas, Illinois had much higher median household incomes ($32,252 vs. $27,016, higher shares on public assistance (7.5 percent vs. 5.8 percent) and much lower poverty rates (11.9 percent vs. 18.9 percent). Poverty rates in Texas were especially high for single-parent families, children, non-Whites and residents of communities near the Mexican border.

Local JTPA operations, including the development, coordination and delivery of training programs, are overseen by Private Industry Councils (PICs) in Service Delivery Areas (SDAs), of which there are 35 in Texas and 26 in Illinois. JTPA Title IIA was the core training program for adults and in-school and out-of-school youth.[6] During PY 1990, Title IIA programs in these states served 38,386 adults and youth in Illinois and 67,122 in Texas.

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[6]Prior to implementation of the 1992 JTPA Reform Amendments in July 1993, Title IIA programs served both adults and youth.

PY 1990 JTPA participation patterns largely reflected the national policy shift in the late 1980s away from relatively quick-fix approaches and toward more intensive, longer-term services. Enrollments in basic education activities continued to increase and average program stays were lengthier in PY 1990 than in previous years. The greatest enrollment share, by major program activity,[7] were in Classroom Training-Occupational Skill and On-the-Job-Training, with approximately half of all enrollments occurring in one of these two activities.

B. Key Research Findings

1. The Who, What, How and Where of Successes

Success rates vary by state as well. The share of terminees who were continuously employed, using the strict-steady definition of employment, increased from 25 percent to around 28 percent from the first to the second postprogram year in Illinois, but was roughly constant in Texas at about 35 percent. Earnings success rates rose from the first to the second year post in both states: from 20 percent to 31 percent in Illinois and from only 22 percent to 25 percent in Texas.

Longer-term program success rates for both measures tended to move in consistent and expected ways with the usual array of demographic, program and employment variables. Success rates were consistently higher for males, adults, whites, those with greater educational attainment and those not receiving public assistance at enrollment. Those with more quarters of employment and greater earnings in the two years prior to entry also experienced greater success postprogram.

Success rates also were higher for participants whose major activities were Occupational Skills Training (OST) and On-the-Job Training (OJT), as well as for those who secured full-time jobs at program termination. Those placed in less seasonally oriented employment tended to be more successful as well. Success rate variation tended to be more pronounced for earnings than for employment success.

Adjusting earnings for family status (Appendix C, for Texas only) and size produced substantial effects on earnings success rates.[8] Those with greater family responsibilities and larger family sizes—including women, minorities and those with less education—faced even more difficulty reaching real levels of economic self-sufficiency when their earnings were adjusted to account for differences in family status and size.

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[7]Major program activity was computed using an algorithm developed by Bill Bowman of Annapolis Economic Research in Annapolis, Maryland.

[8]Earnings adjustments based on family status and size were made treating the participating parent in both single- and two-parent families as the sole earner; and the earnings of nondependent individuals and other family members as those of a single individual.

2. Understanding Program Success

Multivariate analysis offers greater understanding of JTPA employment and earnings success, allowing for measurement of the independent contributions of each particular variable to the rate of success. A core set of demographic and programmatic variables were significantly and consistently associated with employment and earnings success. As with the descriptive analysis, these variables included gender, age, race/ethnicity, education, public assistance status, major program activity (especially OST and OJT), and employment status at termination. In contrast to the JTPA performance standards models which have been estimated and used since the early 1980s to adjust termination and near-term postprogram SDA performance (e.g., USDOL 1994), few of the local employment and population variables had consistently significant effects on success.

Two variables in particular stand out as having the most pronounced and statistically significant effects on rates of success. First and perhaps most troubling for this analysis, prior work and earnings had consistent, large and highly significant effects on postprogram success. This suggests, of course, that some large share of JTPA's post-termination successes—as measured by gross longer-term employment and earnings—were relatively successful prior to program entry as well. Second, securing a full-time job at termination from JTPA was found to contribute significantly and substantially to postprogram employment and earnings success.

3. Views from the Field

Field interviews were conducted with staff in the SDAs selected for their successes,[9] and the results were written up *independently* by researchers in Illinois and Texas. Although the terminology and the implicit weight given each factor identified in the interviews differed somewhat, the conclusions both research teams arrived at in their respective states exhibit remarkable commonality. Major factors judged to be associated with successful JTPA programs based on the field interviews were:

- Constrained choice among available training activities, featuring strong emphasis on individualized programming, reliance on individual training referrals or vouchers for use with a set of approved providers and only in demand or emerging occupations and industries; in some instances, some of these SDAs (e.g., Central Texas) had even engaged in their own longer-term tracking studies

[9] "Success" was estimated statistically based on employment and earnings models which were developed to parallel USDOL/ETA's performance standards approach, but substituting longer-term postprogram continuous employment and 155% poverty earnings for the usual JTPA performance measures.

to identify which occupations were providing their participants the capacity to attain economic self-sufficiency, taking into account family status and size.

- Stress on intake, assessment and counseling as key up front program components and counselors who are empowered with the discretion and responsibility for committing their own budget resources for individuals in need of training—counselors in some SDAs conducted provider approvals as well;

- Heavy emphasis on occupational skills training rather than other employment and training interventions as the major program activity; these SDAs had begun downplaying OJT and (stand-alone) Job Search Assistance (JSA) as primary activities well before reliance on these activities became fairly controversial nationally; and,

- Case management by trained professional case managers who were valued highly by SDA administrators and directors; such case management was described as continuing through program participation and into the postprogram period as well.

Several other features common to these SDAs should be highlighted. First, the SDAs selected tended to small-to-mid-sized in terms of annual allocations or numbers of participants served. They may well have enjoyed the luxury of being small enough to have more easily managed programs generally. Second, they appeared to have avoided politics in terms of awarding provider contracts or allocations of funds within the SDA, largely by adopting policies—long before they became an issue with the Office of the Inspector General (OIG) or the object of USDOL/ETA regulation—which precluded having providers serve on the local PIC. Third, all of these SDAs placed a high value on staff continuity and retention.

A few nonfindings are worth noting as well. One was that not one of the interviews produced a comment about the importance of the national JTPA performance standards and any accompanying performance incentives bonuses. National JTPA performance standards, pegged as they are to relatively low average levels of performance, were not viewed as having much practical relevance for day-to-day program performance management. Another was that, while considerable discussion surrounds which local employment and population factors to employ in the national performance standards models as control factors, these SDAs operated quite successfully relative to their peers despite facing quite varied economic contexts.

C. Policy Implications

A number of important implications for federal, state and local employment and training policy can be drawn from this research. It should be acknowledged that some of these rest on the assumption that there is a positive correlation between the gross outcomes—employment and earnings success rates up to two years postprogram—observed for Illinois and Texas adult and out-of-school youth terminees and real *net* impacts on their employment and earnings.

1. JTPA should place greater emphasis on training, especially Occupational Skills Training. Participation in Occupational Skills Training appears to yield sustained employment and earnings success, a finding which is strongly supported in field interviews with high-performing SDAs in varying labor market contexts. In particular, it would appear that those local programs which have focused their efforts on demand/emerging occupations and industries and which have counseled participants (through intake and structured assessment) about the merits of pursuing jobs with high pay and decent employee benefits have done especially well in terms of the longer-term success measures used here. This is not to say that training is the panacea for all participants or that only training should be provided, but there is considerable room for expanding training offerings in the country's job training programs.[10]

Moreover, SDAs should be strongly encouraged to avoid committing additional public funds into "training" for such traditionally low-paying fields as cosmetology. Such programs have been the bane of training programs for decades. Programs allowing participants to pursue such training only "enable" them, putting off the day when they must confront the realities of the job market and wasting scarce public resources. High-performing SDAs allow such training to occur, just not with public dollars.

2. Access to and understanding of labor market information regarding employment and earning opportunities should be enhanced. All of the successful local JTPA programs relied heavily on labor market information (LMI) to identify which occupations and industries to train for and place their participants in. Given the very central role these two states and their successful SDAs accorded to LMI's use and especially given the national and state movement towards block grants and even vouchers

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[10]A Mathematica Policy Research evaluation of welfare-employment programs, the Minority Female, Single Parent Demonstration, has suggested that combining remedial education and training for some of the more disadvantaged participants may be a preferred approach (Burghardt and Gordon 1990).

for workforce development "programs", policymakers should ensure that appropriate information regarding opportunities for work and for earning is readily accessible.[11]

Access to is only part of the picture. Texas and Illinois have gone well beyond mere access to information. The State Occupational Information Coordinating Committees (SOICCs) in both states, working closely with their various education, employment and training agency partners, have developed and supported model tools for program planners, counselors and participants themselves to make use of when attempting to take advantage of and apply such information. For example, the Texas SOICC first developed SOCRATES, the Standardized Occupational Components for Regional Analysis of Trends in Employment System, in the late 1980s to put labor market planning and counseling information at the fingertips of the frontline staff who most needed them. More recently the Texas SOICC designed and instituted Texas CARES, the Career Alternative of Resource Exploration System, which provides students and counselors with visually oriented tools for exploring key aspects of both civilian and military occupations of interest, including the aptitudes, interests and skills required to succeed on the job; the training preferred by employers and required training time (expressed in Specific Vocational Preparation Time); and available training programs. SOCRATES and CARES are tools being used actively by programs ranging from JTPA to vocational education to the Job Opportunities and Basic Skills (JOBS) training programs, as well as the Texas' 24 regional Quality Work Force Planning Initiatives which gained national recognition as a coordination model in 1991. Similar LMI-related efforts are now underway in Illinois.[12] However, during the period covered by this research, most JTPA programs in the state were relying on LMI disseminated by Illinois' Occupational Information Coordinating Committee and their own information on job opportunities validated in discussions with local employers, planners and other knowledgeable sources.

Moreover, the U.S. Congress recently appropriated funds to the U.S. Department of Labor in 1994 to launch America's Labor Market Information System (or ALMIS)

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[11]In September 1995, Texas will begin implementing the provisions of House Bill 1863 which was passed by the Texas Legislature in May. Key provisions seek to reform the State's welfare system and to consolidate most federal and state workforce development programs (excluding adult and vocational education). Local areas which establish workforce development boards may receive what amounts to employment and training "block grants" from the governor by way of the newly created Texas Workforce Commission. Illinois also enacted major changes to its workforce programs in 1995, creating a new human resource investment council.

[12]For example, HORIZONS is a hard-copy and software-based tool now being made available to counselors and planners in JTPA, high school, postsecondary institutions and related programs by the Illinois Occupational Information Coordinating Committee. It includes information on employment by occupation and on programs available from various education and training institutions in Illinois.

project. The ALMIS effort is comprised of six state-led consortia around the country, including a Michigan/Missouri-led consortium which is creating a nationwide electronic talent/help-wanted bank; a Maryland-led consortium (in which Texas is a partner) which is seeking ways to make UI wage records better tools for LMI; and one led by Rhode Island which is exploring the creation of a standard wage information program. These ongoing efforts are intended to enhance the nation's LMI system in order to provide better, more accessible information for those who require it. Based on the findings in this research project, ALMIS merits continuing support from the U.S. Congress and the various state partners in these consortia.

*3 **Federal and state workforce development policy needs to give much more attention to day-to-day performance management practices of its local job training system and ensuring that such practices are implemented systemically.*** While performance standards, per se, are apparently not "driving" the more successful training programs, sensible, day-to-day performance management is playing a strong role. And, the programs examined for this research are clearly carrying out their performance-oriented functions within the context of a wider management system which encompasses longer-term economic self-sufficiency as the goal for their participants.

Key elements and features of such policies include the following:

- Open, nonpolitical processes for determining which providers will be approved to provide training services in the area for a given time period;

- Individual-referral, rather than standing subcontract, approaches for delivering training services locally, to foster greater reliance on training in demand-occupations and industries and quicker responses to changes in labor market demand; and

- Federal and/or state technical assistance and training to foster local evaluations of training outcomes, which might include longer-term tracking of employment, earnings and welfare receipt via administrative records, as well as greater sharing and discussion of such evaluation results; the ultimate aim of these efforts should clearly be to enhance capacity of localities for assessing their own programs and their efficacy and for designing and implementing improved training strategies as a result.

While voucher-based approaches to education and training have entered the national and state policy limelight recently, this research offers little supportive evidence

for them. It is a very big leap—probably an unwarranted one at that—from arguing for the use of an individual-referral training approach coupled with intensive career counseling and individualized assessment based on accessible, leading-edge LMI to a pure voucher system. The Chicago-area SDA studied in this research often has been characterized as a "voucher-based program" but in fact more closely resembles the enhanced, individual-referral approach just described.

Performance standards do have a vital role to play in federal and state policies regarding workforce development initiatives, including JTPA.[13] Among other things, outcome-based standards have provided, and continue to provide, concrete guidance to state and local programs as to the centrality of employment and earnings as the end-purpose of their interventions. It may be that performance standards and their associated policies play a more important role, as currently structured, for low-to-mid-performing programs than for the high-performing SDAs observed in this research. Despite real advances in performance standards policies since the early 1980s, a clearly articulated, comprehensive performance management *philosophy* for U.S. workforce development programs has remained elusive.

4. Federal and state policy also must give special attention to ensuring that those with pressing family and parenting demands are able to participate effectively in training programs and ultimately secure jobs at wages which allow them to become self-sufficient. Those with pressing family and parenting responsibilities arrive with even greater burdens and barriers to training program participation than do (most) other family members or nondependent individuals. They also have more pressing demands placed on them to work and earn when they exit the programs than do other participants. Limited analysis conducted here on the impact of adjusting for family status and size on success rates suggests that JTPA programs have a long way to go to ensure that such efforts are accessible, participation is effective and the earnings outcomes are sufficiently successful.

5. Maintaining and possibly even expanding the current Earned Income Tax Credit should receive high priority on the nation's policy agenda. While a number of JTPA terminees have left the program and found their way to successful employment and earnings outcomes, far too many have not. And, clearly not all of those counted as successes here in this gross outcomes analysis would actually have been true successes if measured in terms of net employment and earnings impacts. The overwhelming majority

[13]For a discussion of some of the broader policy issues surrounding the role of performance standards, see: Barnow (1992) and King (1988).

of these JTPA terminees were severely disadvantaged economically when they enrolled—and, when they earned wages prior to program entry, their earnings were quite low—and they managed to work hard following their exit even if they did not qualify as successful.

It is essential that national policy acknowledge this work ethic and effort by ensuring that work does pay. The most efficient way yet devised in this country, despite the administrative and related problems it has had (USGAO 1993), is by way of the Earned Income Tax Credit (or EITC). Changes to the EITC are currently being debated in the Congress, with some proposing to cut the amount of the credit and to reduce its coverage substantially. Instead, if work is to be rewarded, maintenance and even expansion of the EITC should be receiving high policy priority.

D. Report Outline

The remainder of this report is organized into two chapters and four appendices. Chapter II provides an overview of Illinois' population, economy and labor market and key features of its JTPA policies and programs, followed by descriptive and multivariate analysis results concerning Illinois' JTPA successes, views gleaned from field visits to selected successful SDAs and a summary of key findings. Chapter III presents similar information for Texas. Appendices A and B contain data tables and detailed regression results for Illinois and Texas, respectively. Appendix C presents additional results for Texas only, examining the effects of adjusting success measures by family status as well as family size.

Successes in Illinois

Profile of Illinois

The state of Illinois has an interesting blend of urban inner-city, suburban, and rural regions. The city of Chicago is one of the nation's largest urban centers. Like most large cities, Chicago faces an array of urban problems which pose challenges to its workforce development efforts. Outside of Chicago is a rapidly expanding suburban region which is locally referred to as the "collar counties". Most of the population and economic growth in the Chicago metropolitan region between 1980 and 1990 has occurred in these counties. Although there are some urban areas outside of the Chicago metropolitan region, they are small cities (< 150,000), and much of the balance of the state is rural. Figure 1 illustrates that most of the counties in the state have a population density of less than 50 persons per square mile. The rural areas in southern Illinois are culturally and economically linked with Kentucky and coal mining, while those in the middle of the state and northern Illinois are more clearly Midwestern and agricultural.

The economic climate across the state during the period of study can be seen through local area wages and unemployment rates. The higher earnings of workers in the Chicago metropolitan area are clearly apparent in Figure 2, which also shows some pockets of relatively high earnings around the mid-size cities in the state, notably Peoria, Rockford, and East Saint Louis. High unemployment characterized the southern regions of the state with relatively low levels of unemployment in the middle of the state (see Figure 3).

Figure 1

Population Density In Illinois, 1990

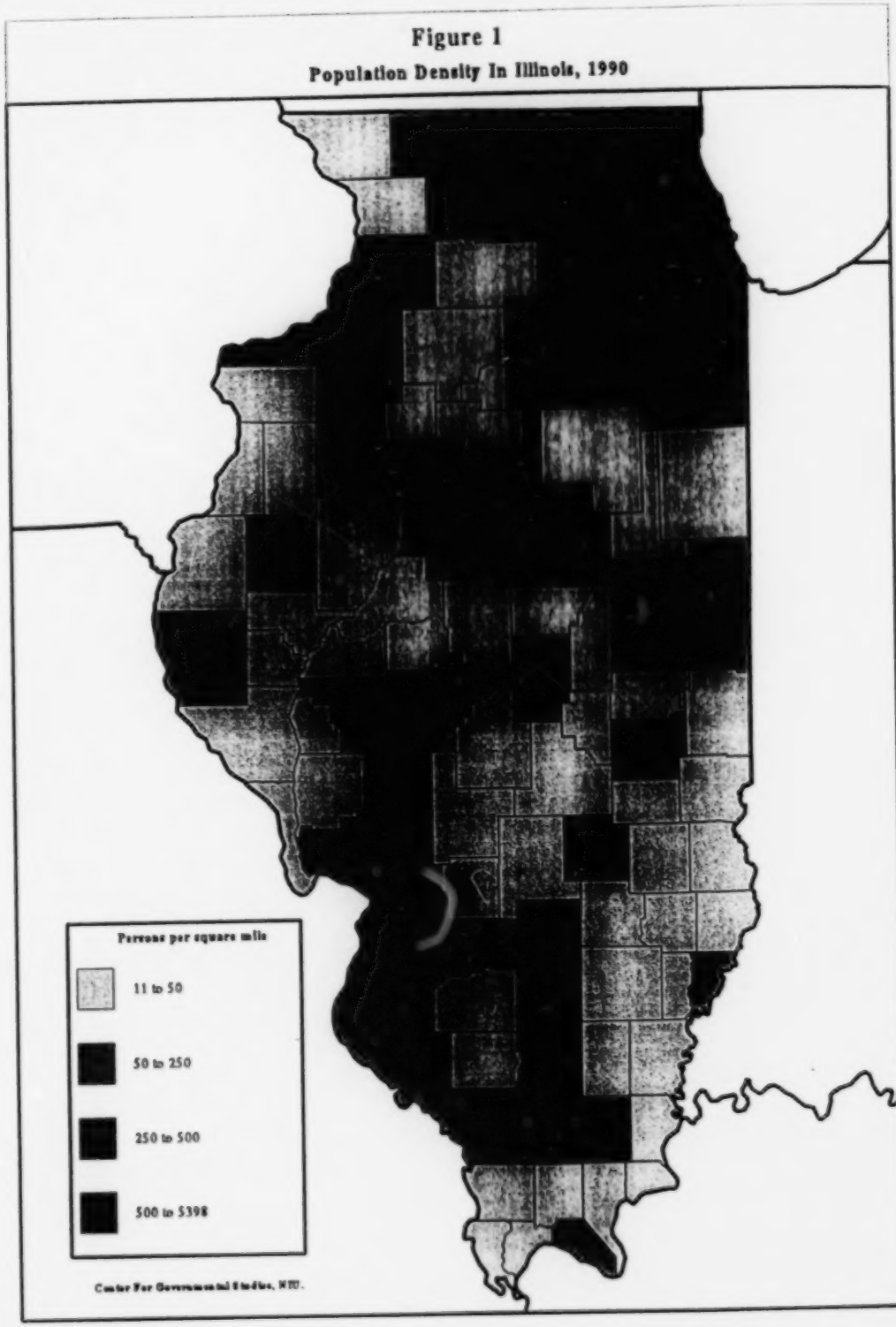

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Figure 2

Average Earnings Of Workers, 1991-1992

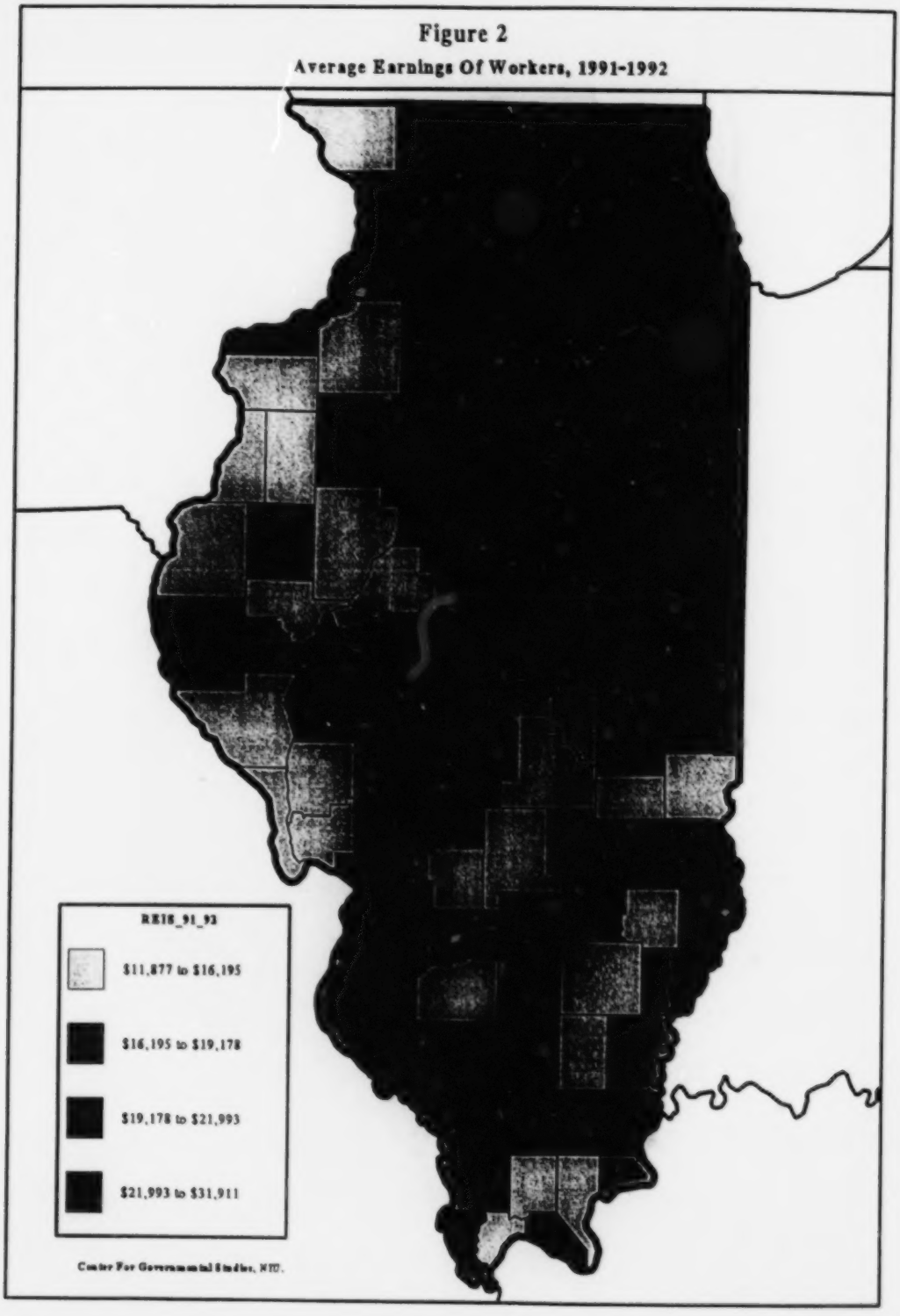

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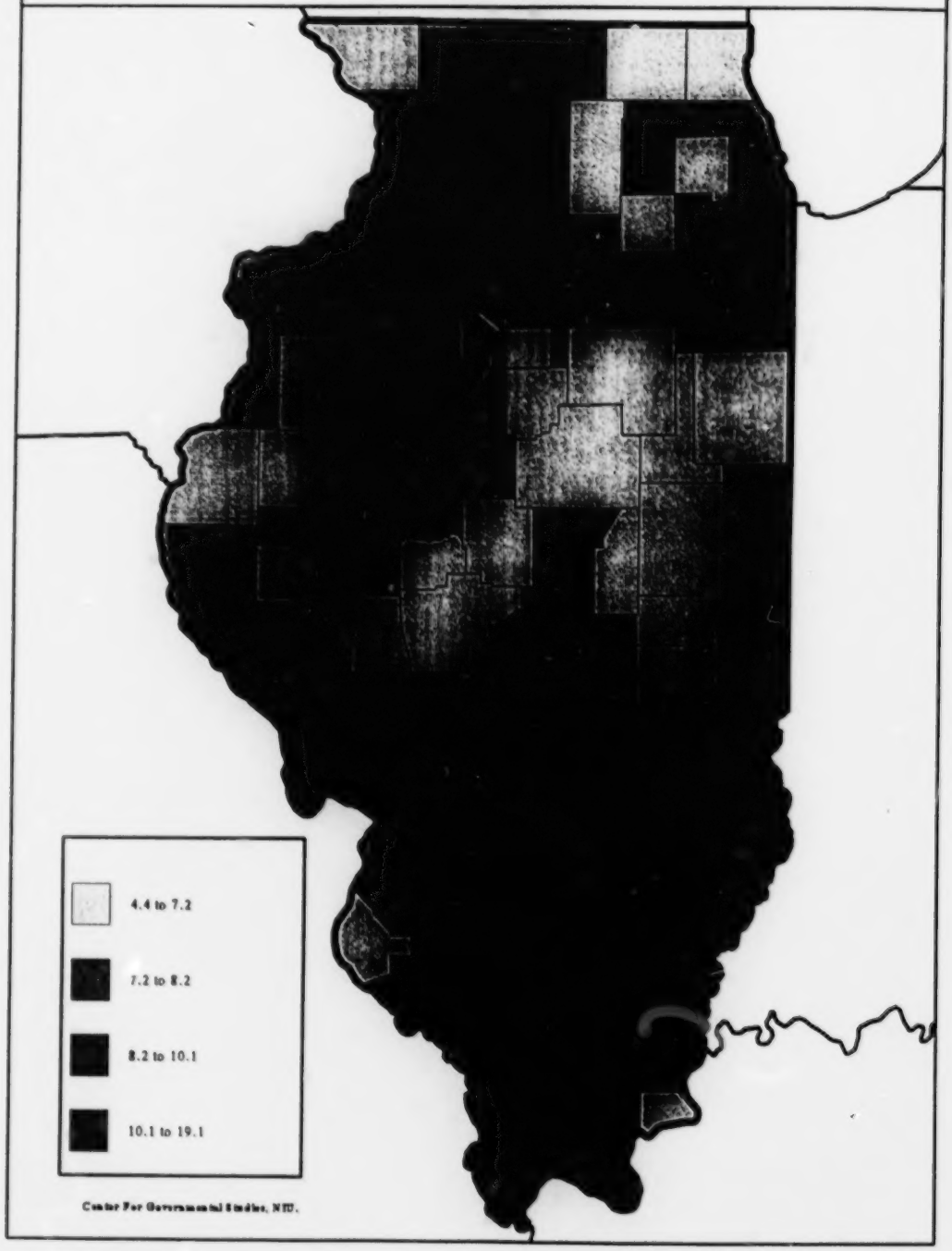
Figure 3

Average Of Quarterly Unemployment Rates, 1991-1992



This examination of average earnings and unemployment rates highlights some of the difficulties faced by rural areas. The typical image of economic distress is the inner city. However, the information presented here illustrates that some areas of rural America also face severe economic problems that rival those of the inner city. Experiencing the situation of high unemployment and low wages with constrained training choices and a geographically disperse population, such rural areas are presented with challenges that parallel the most depressed urban area.

The JTPA program in Illinois

The Job Training Partnership Act (JTPA) established a statewide local delivery system that provides job training for unskilled adults and youth who are economically disadvantaged and for others who face serious barriers to employment. In Illinois, the state's Department of Commerce and Community Affairs administers this program through local partnerships of business-dominated Private Industry Councils and local elected officials. Locally developed plans and programs ensure that JTPA services will meet the needs of the local labor market.

In program year 1990, the 26 Service Delivery Areas in the state (see Figure 4) served 38,386 participants of which 26,933 also left the program during that program year. Of those who left the program, 15,904 were employed at program termination producing an entered employment rate of 59.1 percent. This study focuses on a subset of those who left the program during program year 1990. Specifically, it examines adults and out-of-school youth (18 years of age and over) who were in the program at least seven days.

Descriptive Results

Characteristics of the Study Population. The demographic, program activity and placement

Figure 4

SDA Boundaries, Illinois

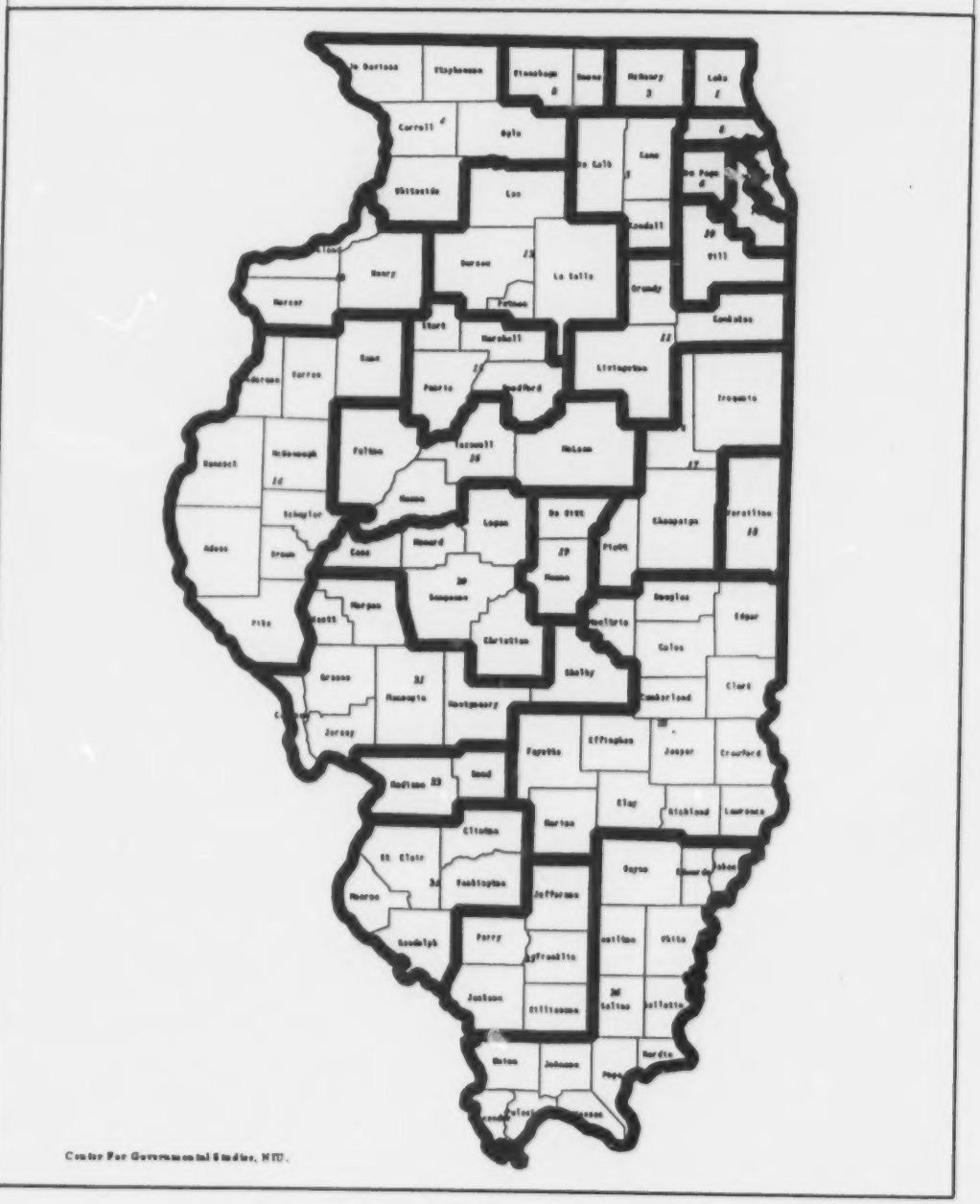


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Table 1
What Were the Characteristics of JTPA Title II-A
Adult and Youth Terminees in PY 1990?

Characteristic	Percent	Characteristic	Percent
GENDER		*PRE PROGRAM HISTORY*	
Male	45.3	Earnings 1st Year Prior	817
Female	54.7	Earnings 2nd Year Prior	261
		Ave. Quarters Enrolled - 1st Year	1.7
AGE GROUP		Ave. Quarters Enrolled - 2nd Year	1.6
18 - 21	26.4		
22 - 29	31.8	*TERMINATION STATUS*	
30 - 39	26.8	No Employment	35.7
40 - 49	10.0	Minimal Employment	1.2
50 +	5.1	Substantial Employment	16.7
		Full Employment	52.4
RACE/ETHNIC		Median Wage	$4.50
White	46.6		
Black	40.9	*OCCUPATION AT TERMINATION*	
Hispanic	12.4	Management/Administration	2.4
Other	2.1	Professional	6.0
		Sales	7.9
EDUCATION		Clerical	23.4
Less than H.S.	25.3	Service	27.5
High School/GED	52.2	Agriculture	.7
More than H.S.	22.5	Precision Production	8.3
		Operator	23.8
PERSONS IN FAMILY			
1	42.9	*INDUSTRY AT TERMINATION*	
2	19.0	Agriculture	4.0
3	16.0	Mining	3.4
4	11.1	Construction	2.7
5 or more	11.0	Manufacturing	20.5
		Trans, Elect, Gas, Etc.	5.1
WELFARE STATUS		Wholesale	3.5
No Public Assistance	55.2	Retail	15.6
AFDC recipient	24.1	FIRE	4.2
Other Public Assistance	39.9	Services	38.9
		Other	2.2
MAJOR PROGRAM ACTIVITY		TOTAL	20127
Basic Skills Training	8.5		
Ocuupational Skills Training	40.0		
On the Job Training	28.4		
Job Search Assistance	10.8		
Other	11.3		

characteristics of the Illinois JTPA population used in this study are displayed in Table 1. The majority of the terminees were female (54.7 percent). The study population also tended to be young, with an average age of less than thirty. While most of these former JTPA clients were white (46.6 percent), a substantial minority were black (40.9 percent) and one out of eight were Hispanic. Just over half had a high school education and an unexpectedly high percentage had some form of post-high school education (22.5 percent). While a large number of JTPA clients were living alone, the majority had at least one other person in their family. Specifically, 56.1 percent lived in a family with at least one other person. Almost 40 percent received some form of public assistance including 24.1 percent who were AFDC recipients.

The most common program intervention received by JTPA participants who left the program in PY90 was occupational classroom training[1]. The emphasis on developing occupational skills is also evidenced by the 28 percent of participants who received on-the-job training as their major activity. Relatively few JTPA participants received basic educational services or job search assistance as their major activity.

Almost 65 percent of the participants in the study population, which excluded participants with less than a one week stay in the program and in-school youth, were reported as employed when they left the JTPA program. This is somewhat higher than the entered employment rate for all participants (59.1 percent). Furthermore, the vast majority of those who were employed were reported as having full-time employment (35 or more hours per week). In fact, over 80 percent of participants who where reported as employed when they left the program obtained full-time

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[1]Major program activity was determined by using an algorithm developed by Bowman.

employment. The median wage[2] for those placed into employment was $4.50.

Most participants who were placed into jobs from the program found employment in one of three major occupational categories -- clerical, service, and operators/laborers. Together, these three occupations account for almost 75 percent of all employment reported by the program.

Participants were also clustered into three major industries -- manufacturing, service, and retail industries. Over three fourths of all placements were in one of these three industries. Among the three, service industry jobs were most common, accounting for 38.9 percent of all employment.

There were also a number of important, but not surprising differences, between male and female JTPA participants (see Table 2). Although the two groups were similar with respect to age, race/ethnicity, and education, males were much more likely to live alone than females. While almost 60 percent of males lived in a single person family at enrollment, fewer than 30 percent of the females were found with this living arrangement,

Females were much more likely to have been receiving public assistance than males at the time of enrollment. One obvious difference is the percentage that received AFDC: while less than 7 percent of male JTPA terminees received AFDC at enrollment, almost 40 percent of the females were AFDC recipients. Females were also more likely to have received other forms of assistance (general assistance, refugee assistance, food stamps, and supplemental security income payments) than males (47.1 percent versus 31.2 percent).

Male and female participants also received a different mix of program services. The

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[2]The median wage is the point in the wage distribution where one half of the population earns wages above that level and one half earns wages below that level.

Table 2
What Differences Were There Among
Male and Female PY 90 Terminees?

Characteristic	Male	Female	Characteristic	Male	Female
AGE GROUP			*PRE PROGRAM HISTORY*		
18 - 21	26.2	26.5	Earnings 1st Year Prior	$1066	$632
22 - 29	32.3	31.4	Earnings 2nd Year Prior	467	132
30 - 39	26.8	26.8	Ave. Quarters Enrolled - 1st Year	1.8	1.7
40 - 49	10.1	9.8	Ave. Quarters Enrolled - 2nd Year	1.7	1.5
50 +	4.6	5.5			
			TERMINATION STATUS		
RACE/ETHNIC			No Employment	32.1	38.6
White	46.0	43.5	Minimal Employment	0.8	1.6
Black	38.8	42.6	Substantial Employment	8.9	12.3
Hispanic	12.8	12.1	Full Employment	58.3	47.5
Other	2.4	1.8	Median Wage	$4.75	$4.25
EDUCATION			*OCCUPATION AT TERMINATION*		
Less than H.S.	28.5	22.7	Management/Administration	2.1	2.5
High School/GED	50.8	53.3	Professional	3.4	8.5
More than H.S.	20.8	24.0	Sales	5.0	10.5
			Clerical	10.3	35.4
PERSONS IN FAMILY			Service	26.9	28.0
1	59.1	29.5	Agriculture	1.1	0.3
2	10.7	25.8	Precision Production	14.8	2.4
3	10.2	20.8	Operator	36.3	12.4
4	9.1	12.7			
5 or More	10.9	11.2	*INDUSTRY AT TERMINATION*		
			Agriculture	4.6	3.4
WELFARE STATUS			Mining	4.2	2.7
No Public Assistance	67.4	44.8	Construction	4.2	1.2
AFDC Recipient	6.8	38.4	Manufacturing	26.5	15.0
Other Public Assistance	31.2	47.1	Trans, Elect, Gas, Etc.	6.9	3.5
			Wholesale	4.1	3.0
MAJOR PROGRAM ACTIVITY			Retail	15.9	15.3
Basic Skills Training	7.9	9.0	FIRE	2.2	6.0
Occupational Skills Training	28.3	51.5	Services	29.2	47.8
On the Job Training	38.9	19.6	Other	2.1	2.2
Job Search Assistance	12.2	9.6	TOTAL	9112	11015
Other	12.6	10.3			

major difference concerns the receipt of on-the-job training versus classroom training in occupational skills. While 38.9 percent of males received on-the-job training as their primary activity only 19.6 percent of females received this form of training as their major intervention. On the other hand, females were much more likely to have received occupational training in a classroom than males (51.5 percent versus 28. percent for females and males, respectively.)

While both males and females experienced low earnings in the two years prior to enrollment, males had higher pre-program earnings in both years than females. For example, in the year immediately prior to enrollment, the median earnings of males was $1066 while median earning for females was only $632.

Males also experienced higher levels of employment and earnings at termination from the program. Not only were males more likely to be employed, 67.9 percent versus 61.4 percent for females, but they were also more likely to be full-time employees, 58.3 percent compared to 47.5 percent for females. The median wage for employed males also was 50 cents more per hour than the median wage for females.

The distribution of males and females across occupations and industries reflected the differences one finds among low income workers in the general population. For example, female JTPA participants were much more likely to have been placed into clerical occupations and much less likely to be employed as operators, fabricators or laborers. In a similar vein, females were also much more likely to have been placed in service industry jobs while males were more likely to have found jobs in manufacturing and construction.

Program Success Rates

Employment Success. Our first observation concerns the rise in the "employment

success rate" of participants from the first to second program year. As noted earlier, participants who had "significant" employment[3] during each of the four quarters during a post-program year were considered an "employment" success for that year. This success rate rose from 24.5 percent during the first post-program year to 28.0 percent for the second post-program year (see Table 3).

In both of the post-program years there was a great deal of variation in the employment success rates of participants according to the program activities they undertook. The difference across the activities ranged almost 20 percentage points in each program year. The most interesting feature of this distribution of success rates was its stability over time: the rank ordering of the program activities on the basis of their associated employment success rates was exactly the same in both post-program years. On-the-Job Training participants achieved the greatest levels of success followed by those who received Occupational Skills Training, Job Search Assistance, "Other" interventions and finally, Basic Skills training.

One of the factors that has a major influence on the post-program employment success is the pre-program work experience of the participant. A comparison of the median pre-program wages of "successful" participants with the pre-program wages of the total population, reveals that the successful participants had much higher pre-program wages than the total study population. For example, the study population had median pre-program earnings of $817 during the first pre-program year while those that passed the employment success criteria we have established had pre-program earnings of $2434.

A second factor that had a strong impact on post-program earnings success of participants

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[3]Significant employment in a quarter was defined as employment that produces earnings equivalent to minimum wage employment at twenty hours per week for thirteen weeks ($1105).

Table 3
What Percent of PY 90 Terminees Were Continuously Employed During the First and Second Post Program Year?

Characteristic	Program Year First	Program Year Second	Characteristic	Program Year First	Program Year Second
GENDER			*PRE PROGRAM HISTORY*		
Male	24.9	27.7	Earnings 1st Year Prior	$2434	$2314
Female	24.2	28.3	Earnings 2nd Year Prior	$1479	$1476
AGE GROUP			*TERMINATION STATUS*		
18 - 21	21.6	25.4	No Employment	8.6	14.1
22 - 29	25.1	28.8	Minimal Employment	17.5	28.5
30 - 39	26.6	29.3	Substantial Employment	23.2	26.2
40 - 49	27.5	29.8	Full Employment	35.9	37.9
50 +	23.1	26.8	Median Wage	$5.50	$5.26
RACE/ETHNIC			*OCCUPATION AT TERMINATION*		
White	28.2	31.6	Management/Administration	39.7	42.3
Black	18.6	21.8	Professional	53.2	56.7
Hispanic	29.7	35.3	Sales	34.8	30.0
Other	31.7	31.2	Clerical	36.7	40.9
			Service	27.3	28.7
EDUCATION			Agriculture	14.4	18.9
Less than H.S.	16.6	18.9	Precision Production	36.3	34.0
High School/GED	25.7	29.7	Operator	34.0	36.1
More than H.S.	30.7	34.3			
			INDUSTRY AT TERMINATION		
PERSONS IN FAMILY			Agriculture	30.7	31.7
1	23.0	25.6	Mining	33.7	43.5
2	23.8	28.3	Construction	22.8	26.0
3	26.2	30.7	Manufacturing	37.3	39.5
4	28.3	32.6	Trans, Elect, Gas, Etc.	34.3	35.3
5 or More	25.7	30.9	Wholesale	41.1	40.9
			Retail	26.2	27.1
WELFARE STATUS			FIRE	34.5	44.1
No Public Assistance	24.0	36.1	Services	34.0	46.1
AFDC Recipient	18.2	22.1	Other	30.8	34.8
Other Public Assistance	19.7	22.8	TOTAL	24.5	28.0
				20127	20127
MAJOR PROGRAM ACTIVITY					
Basic Skills Training	11.9	14.8			
Occupational Skills Training	24.8	29.6			
On the Job Training	31.0	33.2			
Job Search Assistance	23.5	26.3			
Other	18.0	20.9			

was their placement into a job, especially full-time employment. Less than one out of twelve participants who were reported as unemployed when they left the program were later found to meet the criteria for an employment success during the following year. In contrast, over a third of the participants who had full-time jobs at termination from the program were employment successes in the same year. These findings also suggest that the characteristics of the job *at placement* can have an important impact on subsequent earnings, a point often missed in the effort to monitor long-term outcomes.

There were also differences in the employment success rates of participants who were placed into different occupations and industries although the results of this analysis offered no surprises. Participants placed into professional, executive/administrative, and precision production jobs had relatively high levels of employment success during the post-program period; those placed into agriculture, sales and service occupations experienced lower levels of success. In this context, a major finding is the poor success rate of participants who found jobs in the retail industry.

An examination of the employment success rates of different participant subgroups revealed that the success rankings of these subgroups were fairly consistent across the two post-program years. Those subgroups that enjoyed relatively high levels of success during the first post-program year maintained their relative advantage in the second year. The one major exception to this was the employment success of males was slightly higher than the success for females in the first post-program year while the reverse was true in the second post-program year, with females experiencing higher levels of success than males..

Other findings included the relatively high employment success rate of Hispanics. In the

first post-program year, they were second only to the "Other" participants (largely Asians) in their employment success and, in the second post-program year their performance out paced that of all groups. This finding may be somewhat surprising since Hispanics are typically characterized as a hard-to-serve client group. Although this participant group does face some substantial barriers to employment, this result suggests that they also possess a strong work ethic that serves to promote high levels of labor market success.

Both the educational and welfare status of JTPA participants appeared to have a strong influence on employment success. In both post-program years, the employment success rate of participants with some post high school education was nearly double the rate for high school dropouts. In addition, the employment success rates of participants who were not receiving welfare at enrollment were over 10 percentage points higher than those receiving AFDC or some other form of public assistance by the second post-program year.

It also appears that living in a family setting can have an impact on employment success. Participants who lived alone had the poorest success rates. Furthermore, the earnings success rates climbed with each additional family member up until a family size of five was reached, where a slight decline is noted. These findings are consistent with the notion that other family members are a source of support and encouragement to the program participants and provide them with incentives to be successful.

Earnings Success. The results for the earnings success[4] measure mirrored those

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[4]The earnings success criteria was whether the former participant had earnings that exceeded 155 percent of the poverty level. This level of earnings would make them ineligible for the major government assistance programs such as JTPA and AFDC.

of the employment success analysis with some very minor exceptions (see Tables 3 and 4). For example, while females were found to have slightly higher employment success than males in the second post-program year, males were found to have higher rates of earnings success during both post-program years. In general, however, the relationships discussed in relation to the earnings success measure are the same as those found with the employment measure.

The most interesting finding concerns differences in earnings and employment success over time. While there was a modest increase in the percentage of employment successes from the first to second post-program year (24.5 percent to 28.0 percent), there was a dramatic increase in the percentage that could be considered an earnings success (19.7 percent to 31.0 percent). This led to a reversal in the relative prominence of the two types of success. During the first post-program year, the percentage of clients who met the criteria of an employment success was greater than those who met the criteria for an earnings success. However, there were more clients who experienced an earnings success than an employment success during the second post-program year.

Summary of Descriptive Analysis. This examination of the success rates across these two measures and over time produced three major findings. The first two concern the magnitude of the success rates and the relationship between the measures over time. Regardless of which measure is used, more participants were successful in the later post-program period than they were in earlier period. Second, the rate of increase was greater for earnings than employment success.

The third finding concerns the relationships between the outcome measures and the demographic, program activity, and termination characteristics of clients. With only minor

Table 4
What Percent of PY 90 Terminees Had Earnings that Exceeded 155 Percent of the Poverty Level During the First and Second Post Program Year?

Characteristic	Program Year First	Program Year Second	Characteristic	Program Year First	Program Year Second
GENDER			*PRE PROGRAM HISTORY*		
Male	22.0	32.5	Earnings 1st Year Prior	$2827	$2342
Female	17.8	29.8	Earnings 2nd Year Prior	$1798	$1617
AGE GROUP			*TERMINATION STATUS*		
18 - 21	13.3	26.9	No Employment	6.5	17.2
22 - 29	21.3	32.5	Minimal Employment	10.6	22.0
30 - 39	22.8	32.8	Substantial Employment	9.6	25.1
40 - 49	24.3	34.8	Full Employment	31.0	41.9
50 +	17.8	26.3	Median Wage	$5.50	45.50
RACE/ETHNIC			*OCCUPATION AT TERMINATION*		
White	22.1	33.4	Management/Administration	36.4	46.9
Black	14.5	25.1	Professional	59.4	63.7
Hispanic	26.1	41.3	Sales	12.9	27.5
Other	32.4	36.8	Clerical	30.4	43.1
			Service	15.8	28.8
EDUCATION			Agriculture	10.0	25.6
Less than H.S.	11.1	20.1	Precision Production	33.6	43.7
High School/GED	20.7	33.2	Operator	30.4	41.1
More than H.S.	27.0	38.4			
			INDUSTRY AT TERMINATION		
PERSONS IN FAMILY			Agriculture	26.7	34.5
1	17.6	27.9	Mining	30.9	43.5
2	18.7	30.7	Construction	25.4	35.6
3	21.5	33.7	Manufacturing	34.5	45.8
4	24.1	36.4	Trans, Elect, Gas, Etc.	31.8	40.6
5 or More	22.5	34.5	Wholesale	35.9	44.5
			Retail	12.6	25.6
WELFARE STATUS			FIRE	32.4	46.6
No Public Assistance	28.7	32.4	Services	26	30.3
AFDC Recipient	13.9	25.0	Other	31.5	40.7
Other Public Assistance	14.7	24.3	TOTAL	19.7	31.0
				20127	20127
MAJOR PROGRAM ACTIVITY					
Basic Skills Training	6.5	16.3			
Occupational Skills Training	20.3	32.5			
On the Job Training	26.2	37.0			
Job Search Assistance	18.5	28.8			
Other	12.1	23.8			

exceptions, the relationships between these characteristics and post-program success were consistent over time and across measures. This suggests that these influences on success are extremely stable and can be expected to affect the performance of future job training participants.

Multivariate Analysis

Although descriptive analyses can be instructive, such findings are inconclusive because of the interrelationships among the participant characteristics. For example, it may be that male JTPA participants are no more or less likely to experience post-program success than female participants once we adjust for their greater level of pre-program work experience. In other words, some of the relationships found in the descriptive analysis may be spurious and that the real source of the observed differences are "hidden" factors.

A more stringent test of such relationships is to examine them within the context of a multivariate model. In a multivariate model, the effect of each factor on success can be isolated from the effects of other factors. As a result, significant relationships detected through such models are more likely to represent the "real" relationship between that characteristic or factor and success.

Two different multivariate techniques were employed for this analysis: ordinary least squares regression and logistic regression. Ordinary least squares regression is by far the most commonly used regression technique. The results are easily interpreted and readily understood with a minimum of formal statistical training. However, when the outcome of interest is a dichotomous variable, such as success/non-success, ordinary least squares can provide misleading results. In such cases, logistic regression is the more appropriate technique. The

tradeoff is that the estimates produced by logistic regression are more obtuse and difficult to interpret.

The models presented in this section were estimated using both techniques and the results were compared. This exercise revealed that there were no substantative differences in the results produced by the two procedures. The relationships identified though the ordinary least squares regressions mirrored the logistic regression results. Thus, the selection of an estimation procedure was a moot choice since the information each provided was virtually identical[5].

Employment Success. The first analysis focused on uncovering the factors that explain employment success in the first and second post-program years. A total of twenty-six independent variables was tested to determine what effect they would have on the ability of a client to remain employed during the post-program periods.[6] The models were estimated separately for the two post-program years.

A comparison of the models for first and second year employment success reveals a high degree of consistency between factors that influenced employment success in the two post-program periods (see Table 5).[7] In both post-program periods, blacks, dropouts and persons receiving non-AFDC forms of public assistance were less likely to be continually employed than other JTPA participants. Interestingly, the receipt of AFDC alone did not seem to have an

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[5] When model estimates are presented in this section, they are the ordinary least squares estimates results.

[6] See the appendix for full description of variables used in this and the other models presented in this section..

[7] The criteria used to assess statistical significance in all models was alpha = .01.

Table 5
What Factors Explain the Earnings Success of PY 90 Terminees in the First and Second Post Program Year?

Characteristic	Post-Program Year First	Second
Female	-	
Age 18 - 21	-	
Age 30 - 39		
Age 40 - 49		
Age 50 +		-
Black	-	-
Hispanic		+
Dropout	-	-
Post High School Education	+	+
2 Person Family	+	+
3 Person Family	+	+
4 Person Family	+	+
5+ Person Family	+	+
AFDC Recipient		
Other Public Assistance Recipient	-	-
Basic Skills Training		
Occupational Skills Training	+	+
On the Job Training	+	+
Earnings 2nd Year Prior	+	+
Substantial Employment at Term	+	+
Full Employment at Term	+	+
% Families in Poverty - 90 Census	+	
Median Rent in Area - 90 Census		
Average Unemployment Rate 1991 - 1992		
Average Area Earnings 1991 - 1992		
Employment Growth Rate b/t 1990 - 1992		
r-squared	0.15	0.13

impact on the probability of employment success. However, since most AFDC recipients also receive food stamps, the impact of AFDC was probably being felt through the non-AFDC public assistance variables which includes food stamps as a component.[8]

Program intervention factors also appear to have had an impact of employment success. Participants who received on-the-job training and occupational skills training as their major program intervention had significantly higher success rates than other participants. Unfortunately, data limitations prevent us from establishing whether the relationship between a program intervention and post-program success is a function of the intrinsic quality of that intervention or a consequence of the types of people receiving that intervention[9]. However, the SDA field interviews presented later provides some insights into the process by which "exemplary" programs -- programs with high rates of post-program employment and earnings successes among their participants -- matched participants with various services.

One of the most important influences on post-program employment success was the pre-program earnings history of the participant[10]. The higher the earnings during the two years prior to enrollment, the more likely the participant was to be continually employed in the post-program period. Pre-program earnings was the second most important variable in both of the employment

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[8]This point is easily illustrated by removing the variable representing non-AFDC public assistance from the model. When this is done, the parameter estimate for variable representing AFDC assistance is statistically significant and in the expected direction.

[9]The ability to draw such distinctions would require access to a comparison or control group and the application of more complex statistical procedures..

[10]The importance of the factors was determined by the value of the standardized ordinary least squares regression coefficient.

success models and offers yet another indication of how important it is to examine post-program performance in the context of pre-program work experience.

By far, the most important determinant of whether a participant was an continually employed in the post-program period was whether they were employed full-time when they left the program. Although having "substantial employment" (defined as 20 to 34 scheduled hours of work during the week of termination) had a positive impact on success, the effect of having full-time employment greatly increased the probability of success[11]. In fact, the ordinary least squares parameter estimates indicated that full-time employment increased the probability of success by about 20 percentage points in each of the post-program years.

The dominance of pre-program earnings -- and full-time employment at program termination -- in explaining post-program employment success is clearly seen when the two factors are removed from the models. When this is done, the explanatory power of the models[12] is reduced by more than 50 percent. This means that these two factors can account for over 50 percent of the variation in the employment success explained by the models.

There were a number of additional factors that influenced employment success in the two post-program periods. For example, JTPA participants with some post high school education had greater employment success than other participants. It also appears that persons living alone have a lower probability of employment success than those living with others. Each of the estimates for the family size factors were significant and positive. Furthermore, there is some

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[11]Full-time employment was defined as 35 hours or more scheduled hours.

[12]Explanatory power is estimated by the R^2 value of the ordinary least squares regression model.

evidence to support the suggestion that the more people in the family, the more employment success that can be expected. The detailed tables presented in the appendix confirm that the parameter estimates increases with each additional family member up until there are five or more members in the family. At that point, there is a slight decrease in the probability of success relative to a four person family.. This finding is consistent with the interpretation that each additional family member provides a source of emotional and, possibly, economic support to the JTPA participant. This family support improves their probability of success.

One surprising feature of these models was the inability of the local economic and social factors to contribute to the explanation of participants' success. Only one factor, the average earnings in the area, met our criteria for statistical significance. However, the direction of the relationship was counterintuitive -- one would expect more success in areas of high, rather than low, earnings.

Employment success was also examined for males and females separately in order to determine if the factors influencing success were different for the two groups. The results for the second post-program year (presented in Table 6) illustrate that the factors influencing employment success are largely the same for both sexes. However, there are some notable differences. For example, while male Hispanics were more likely to experience long-term employment success than other males, female Hispanics did not have any more success than other females.

Another factor that had an impact on the male, but not the female, JTPA population was on-the-job training: it had a positive impact on the probability of an employment success for males, but not for females. In fact, the only form of training that appears to promote

Table 6
Do Different Factors Explain the Earnings Success of Male and Female PY 90 Terminees in the Second Post Program Year?

Characteristic	Gender	
	Male	Female
Age 18 - 21		
Age 30 - 39		
Age 40 - 49		
Age 50 +		-
Black	-	-
Hispanic	+	+
Dropout	-	-
Post High School Education	+	+
2 Person Family		+
3 Person Family	+	+
4 Person Family	+	+
5+ Person Family	+	+
AFDC Recipient		
Other Public Assistance Recipient	-	-
Basic Skills Training		
Occupational Skills Training	+	+
On the Job Training	+	
Earnings 2nd Year Prior	+	+
Substantial Employment at Term		+
Full Employment at Term	+	+
% Families in Poverty - 90 Census		
Median Rent in Area - 90 Census		
Average Unemployment Rate 1991 - 1992		
Average Area Earnings 1991 - 1992		
Employment Growth Rate b/t 1990 - 1992		
r-squared	0.13	0.13

employment success for females was occupational classroom training. Thus, the lower rate of female participation in on-the-job training may serve to increase the overall success rate.

Further analysis also revealed that the impact of the job at termination on success was found to be greater for females than males. For example, full-time employment improved the probability of success for females by 23 percentage points while it only improved the probability of success for males by 15 percentage points. For females, possessing a full-time job at termination from the program was the most important influence on post-program employment success. For males, it was pre-program earnings history.

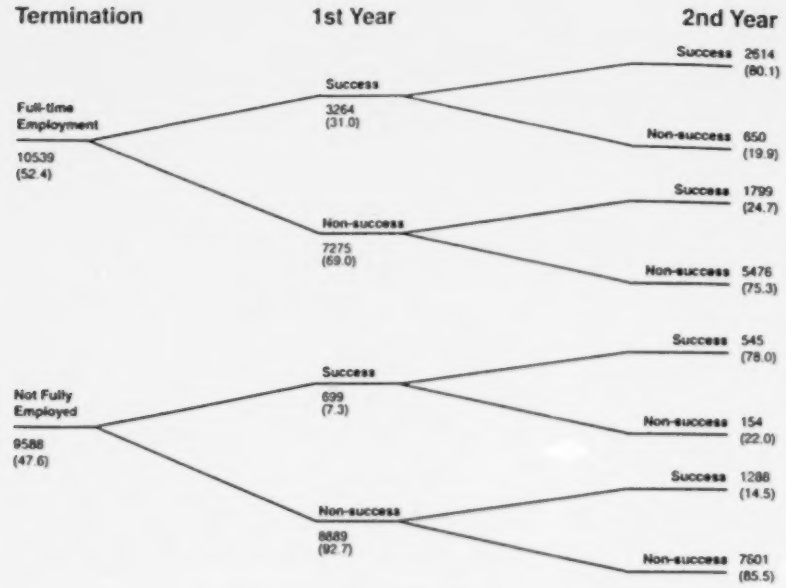
One way to see the importance of current employment to future employment is to examine transition rates overtime. Such transitions are displayed in Figures 5-6. For example, Figure 5 illustrates that 4,325 (33.4. percent) of the 12,949 participants who were employed at termination were continually employed during the first full post-program year; that is, they had earnings above $1,105 during each of the four quarters. In addition, 22.7 percent of those participants were found to be continually employed in both post-program years. In sharp contrast, only 8.6 percent of the participants who were not employed at program termination were employed continually during their first post-program year, and 5.3 percent were continually employed across both post-program years.

Another way of viewing the importance of a job at termination is see what percentage of participants who were employment successes were also employed at termination. The results of this amalysis indicate a strongly relationship between success and employment at termination. Of the 5643 participants who were continually employed in the second post-program quarter, or 82.1 percent (4633) were employed when they left the program.

Figure 5

Earnings Success

(Any Employment at Termination)



Earnings Success

(Full Employment at Termination)

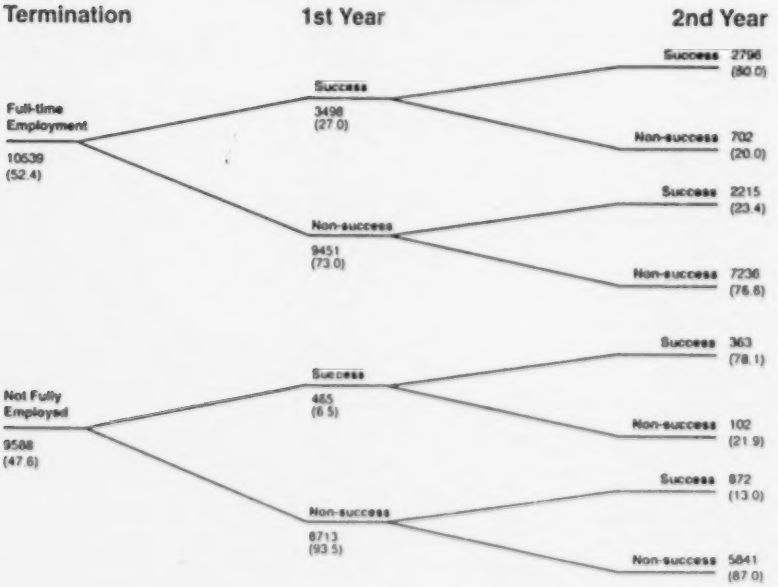


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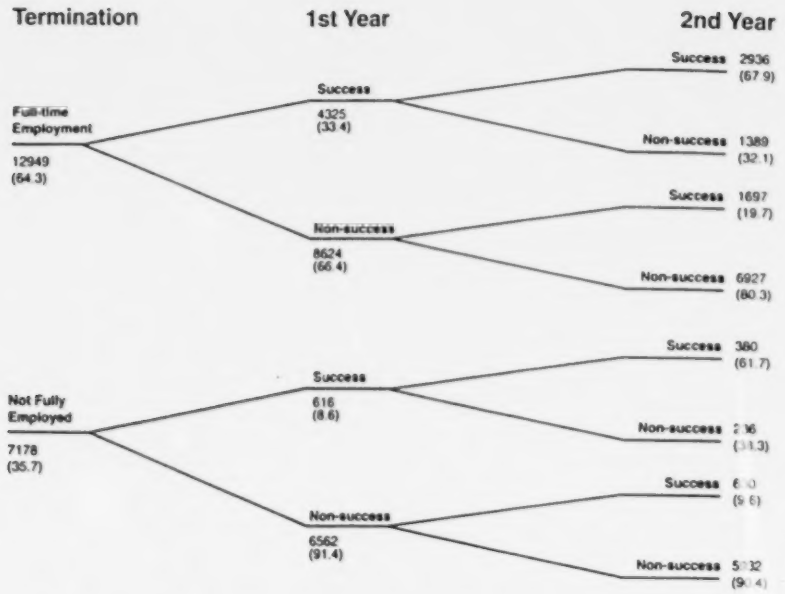
Figure 6

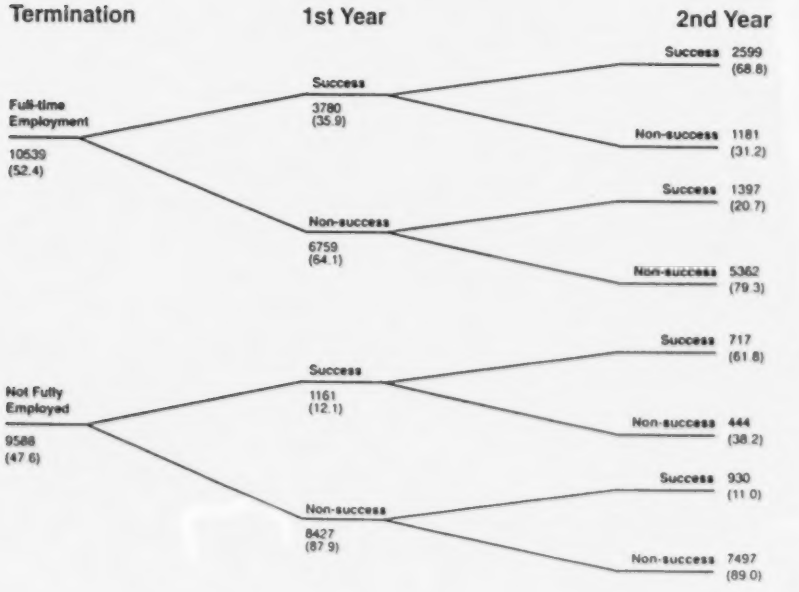
Employment Success

(Any Employment at Termination)



Employment Success

(Full Employment at Termination)



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Earnings Success The multivariate results for the measures of earnings success mirrored the results obtained for employment success (Table 7). Once again, black and dropouts were found to have significantly lower probabilities of success along this measure than other participants. Other points of similarity include the higher probabilities of success for post high school attendees, persons in multi-person families, and participants in occupational skills training and on-the-job training.

The multivariate models for earnings success also confirmed the strong impact of pre-program earnings and employment at placement on post-program outcomes. As in the models for employment success, these factors were the most important predictors post-program success with full-time employment at placement possessing the dominant effect. Once again, the success rate of participants who were employed full-time at termination was about 20 percentages points higher than that for those participants who were not employed or were employed for less than 35 hours per week.

As in the employment analysis, there were some factors that had significant influence in one, but not both, of the post-program years. For example, females were found to have a significantly lower probability of earnings success in the first-post program year but not the second. This appears to suggest whatever initial advantage males enjoyed over females diminished by the second program year. On the other hand, Hispanics were found to have a significantly higher probability of success in the second post-program year but not the first. This is consistent with the interpretation that the strong work ethic among Hispanics tends to produce long-term advantages.

Employment Versus Earnings Success. Although many of the same factors influenced

Table 7
What Factors Explain the Employment Success of PY 90 Terminees in the First and Second Post Program Year?

Characteristic	Post-Program Year First	Second
Female	+	+
Age 18 - 21		
Age 30 - 39		
Age 40 - 49		
Age 50 +		
Black	-	-
Hispanic		+
Dropout	-	-
Post High School Education	+	+
2 Person Family		+
3 Person Family	+	+
4 Person Family	+	+
5+ Person Family	+	+
AFDC Recipient	-	-
Other Public Assistance Recipient	-	-
Basic Skills Training		
Occupational Skills Training	+	+
On the Job Training	+	+
Earnings 2nd Year Prior	+	+
Substantial Employment at Term	+	+
Full Employment at Term	+	+
% Families in Poverty - 90 Census		
Median Rent in Area - 90 Census		
Average Unemployment Rate 1991 - 1992		
Average Area Earnings 1991 - 1992		-
Employment Growth Rate b/t 1990 - 1992		
r-squared	0.12	0.11

both employment and earnings success, some differences did emerge in the analysis. For example, the results from the earnings success analysis suggested that females were no more likely than males to have earnings above 155 percent of the poverty level in either of the post-program years. However, the employment success results indicate that females were much more likely to be continually employed in the post-program period.

Another difference concerns the success rates for AFDC recipients. While the analysis of employment success indicated that AFDC recipients were significantly less likely to be continuously employed in the post-program period, there was no significant difference in the earnings success rates of AFDC recipients and other participants. In other words, AFDC recipients were equally likely to have earnings above 155 percent of the poverty level in the post-program period, they were less likely to be continually employed during the same period. One possible explanation for this result is that earnings level used to define a earnings success is too low to reflect the fluctuations in earnings that result from sporatic employment of AFDC recipients. This also suggests that the continious employment measure may be a more stringent criterion for success than the earnings measure.

Summary of Multivariate Analyses One of the major findings of this study concerns the impact of program interventions. The finding of this study suggest that different program interventions have different success rates and these rates vary by client subgroup. While SDAs exercise little control over the characteristics of participants that apply for their program, they do determine the types of program activities they will fund. The fact that interventions may work for some client subgroups, but not for others, suggests that the ability of counselors to match clients with program interventions is a crucial component in the overall success of the program.

Insights into this matching process are reported in the next section which examines the procedures and practices of the most effective SDAs in the state.

Another major finding was the strong influence that both pre-program earnings and employment at placement have on post-program success. In every model examined, one or the other of these two variables had the dominant effect. Furthermore, the analysis by gender revealed that while the two factors had approximately the same impact on the success of males, full-time employment at placement had a dominant effect for female participants.

Field Interviews

The primary goal of this study was to identify the major influences on post-program success. Clearly, there is a large number of potential influences that cannot be assessed through an empirical examination of administrative data, namely administrative procedures and management practices. As a result, field interviews were incorporated into the research design to help provide a more comprehensive understanding of program success.

The research design required the selection of SDAs that exhibited exceptionally high rates of success on the employment and earnings measures. Specifically, SDAs were selected on the basis of their ability to exceed their model adjusted performance expectations on the two success measures. The models used to produce performance expectations were identical to those presented in the previous section with the exception that program outcome factors were excluded. The reason for this was a desire to limit the performance adjustments to those factors that were beyond the control of program operators. It was felt that immediate program outcomes were clearly within the control of SDAs and, therefore, they were removed from the model.

Performance expectations were produced for each success measure for each post-program year. When actual performance on the success measures was compared to expected performance, three SDAs stood out as consistently high performers. These were North Cook PIC, INC. (SDA 8), the Central Illinois Private Industry Council (SDA 15) and Private Industry Council, Inc. (SDA 21).

Successful programs always are a mix of circumstance, guiding philosophy, strategic planning, and implementation practices consistent with the philosophy and plans. The three high performing SDAs in Illinois highlight the importance of the philosophy, planning, and implementation of local programs..

Circumstances appear not to be a particularly strong factor simply because the SDAs operate in vastly different environments economically and geographically, and in terms of their overall resource base. Specifically, North Cook PIC, Inc., is part of the Chicago metropolitan area and takes advantage of the richness of opportunity available for training. The Central Illinois Private Industry Council organizationally is part of the City of Peoria but has four counties in its jurisdiction. Private Industry Council, Inc., usually referred to as SDA 21, is rural, a former coal mining area (active mines exist), covers eight counties, and is located in Carlinville.

There were three common programmatic features of these SDAS. First, each operates *a system of constrained choice* for JTPA clientele either through a voucher operation or contracts that reimburse [on] tuition and fees only. Second, each places strong *emphasis on counseling and practices a form of case management* in working with the JTPA participants. Third, each has vested their *counseling staffs with considerable decision-making authority*. Each of these

features will be discussed in turn.

Constrained Choice. Each of the programs supports the career aspirations of individuals in the context of constrained choice. One-to-one programming is an operationalized philosophy in each of the SDAs. Occupational training opportunities and career choices by clients are constrained when the occupational field they select is in a state of oversupply, or when the income potential of the occupational field is weak, or when the cost of training exceeds allowable limits set by the PIC. In each of the former cases, a client can argue for their choice by collecting labor market information data and demonstrating the promise of a job. Clients also can cost-share when the training expense exceeds the PIC defined limits.

Constrained choice also exists relative to the training providers. In these three SDAs, training providers are reviewed through an application process and when approved become eligible to receive clientele from the JTPA program. Training providers are cleared one program at a time. In the SDA that uses vouchers, the client enrolls with the service provider and uses the voucher for payment. The provider then bills the SDA for reimbursement. In the other two SDAs, the training provider would be issued a contract that would allow the provider to bill for tuition and fees for clients who have been referred and enrolled.

The three SDAs are generous in permiting their clients to receive trainings from providers beyond the geographic bounds of the SDA. In some cases, client have even received traing out-of-state. The confidence to do this stems from aggressive effort to give clients as much choice as possible and from the on-going reviews of training providers' performance, i.e., the employment and earnings experience of their former clients. Client feed-back also is used.

Empowered Counselors. In-take, assessment, and counseling seem to be the centerpieces

of these three SDAs. Each places strong emphasis on working with individuals, developing training plans and referrals on a one-to-one basis, and assuring that the client understands the training requirements and routine associated with their choice. Much emphasis is placed on this counseling function and counselors clearly are key personnel, empowered with significant discretionary authority in referring clients and thereby committing training resources of the SDAs. In at least one of the SDAs, counselors also are instrumental in "clearing" training providers through the application process and on-site interviews.

The two urban area SDAs have professionalized their counseling staff by requiring baccalaureate degrees and encouraging that an additional degree and/or training be pursued. The rural SDA emphasizes that the counseling staff be very knowledgeable of the local area and participate in training opportunities, especially those provided through the state's technical assistance offerings.

Case Management. A third practice common to the three SDAs is that of case management: the counseling function does not stop once referrals are made. In one SDA, training providers are asked to report to the counselor when a client is missing training sessions. The counselor then pursues the matter to determine the problem and provide encouragement. In each SDA, and in a formal sense in one of the SDAs, each counselor's results with clients are reviewed in terms of employment and earnings outcomes as are training providers.

Finally, these three high performing SDAs emphasize that they fund training, especially occupational skill training. On-the-job training is virtually not funded and this was true in Program Year 1990 before the U.S. DoL placed limits on on-the-job training.

The above operational and programming features are held in common among the three

SDAs. Organizationally, however, the three are quite different from each other. One is part of a city and its employees are municipal employees. The other two are independently incorporated. One covers a portion of a county; one covers four counties; and one offers services in eight counties. One has not a single community college within its boundaries. Commonality is found in the philosophy that guides the programs and in features of their implementation.

Appendix A

Illinois Data

Definitions of Variables in Regressions

Variable	Description
Female	Dummy variable for female gender
Age 18 - 21	Dummy variable for individuals aged 18 - 29
Age 30 - 39	Dummy variable for individuals aged 30 - 39
Age 40 - 49	Dummy variable for individuals aged 40 - 49
Age 50 +	Dummy variable for individuals aged 50 and over
Black	Dummy variable for black race
Hispanic	Dummy variable for Hispanic ethnicity
Dropout	Dummy variable for last grade completed less than 12
Post High School Education	Dummy variable for high school completed and attendance at academic, technical or vocational school
2 Person Family	Dummy variable for individuals in families of two individuals
3 Person Family	Dummy variable for individuals in families of three individuals
4 Person Family	Dummy variable for individuals in families of four individuals
5+ Person Family	Dummy variable for individuals in families of five or more individuals
AFDC Recipient	Dummy variable for individuals receiving AFDC while in JTPA
Other Public Assistance Recipient	Dummy variable for individuals receiving other assistance while in JTPA
Basic Skills Training	Dummy variable for individuals for whom basic skills training was the major activity
Occupational Skills Training	Dummy variable for individuals for whom occupational skills training was the major activity
On the Job Training	Dummy variable for individuals for whom on the job training was the major activity
% Families in Poverty - 90 Census	Percent of families in poverty in county
Median Rent in Area - 90 Census	Median rent in county
Average Unemployment Rate 1991 - 1992	County unemployment rate averaged for 1991 and 1992
Average Area Earnings 1991 - 1992	County per-capita income in averaged for 1991 and 1992
Employment Growth Rate b/t 1990 - 1992	Growth rate of employment in county between 1990 and 1992

A-1

What Factors Explain the Employment Success of PY 90 Terminees in the First and Second Post Program Year?

Characteristic	Post-Program Year First	Second
Intercep	0.220568 *4.791*	0.243284 *5.025*
Female	0.027120 *4.189*	0.031132 *4.573*
Age 18 - 21	-0.004197 *-0.542*	0.000254 *0.031*
Age 30 - 39	0.004648 *0.619*	-0.002132 *-0.270*
Age 40 - 49	0.001658 *0.159*	-0.014649 *-0.338*
Age 50 +	-0.031955 *-2.274*	-0.032833 *-2.222*
Black	-0.059936 *-7.777*	-0.052871 *-6.524*
Hispanic	0.012269 *1.147*	0.041671 *3.704*
Dropout	-0.049796 *6.762*	-0.066445 *-8.581*
Post High School Education	0.032254 *4.440*	0.030377 *3.977*
2 Person Family	0.016260 *1.907*	0.037162 *4.144*
3 Person Family	0.038706 *4.302*	0.059523 *6.282*
4 Person Family	0.045453 *4.508*	0.064179 *6.054*
5+ Person Family	0.029299 *2.924*	0.055694 *5.286*
AFDC Recipient	-0.031074 *-3.638*	-0.035840 *-3.990*
Other Public Assistance Recipient	-0.018392 *-2.700*	-0.026476 *-3.696*
Basic Skills Training	-0.000641 *-0.053*	0.001889 *-0.148*
Occupational Skills Training	0.028972 *3.676*	0.042008 *5.068*
On the Job Training	0.032782 *3.883*	0.027558 *3.104*
Earnings 2nd Year Prior	0.000006743 *19.504*	0.00000820 *22.566*
Substancial Employment at Term	0.127110 *12.739*	0.099001 *9.435*
Full Employment at Term	0.233060 *36.423*	0.192916 *28.671*
% Families in Poverty - 90 Census	-0.000578 *-0.573*	-0.000315 *-0.297*
Median Rent in Area - 90 Census	-0.003854 *-1.975*	-0.002487 *-1.212*
Average Unemployment Rate 1991 - 1992	-0.001341 *-0.670*	0.001467 *-0.697*
Average Area Earnings 1991 - 1992	-0.001343 *-1.592*	0.002292 *2.583*
Employment Growth Rate b/t 1990 - 1992	0.000774 *-0.711*	0.000292 *0.255*
r-squared	112	0.11

Do Different Factors Explain the Earnings Success of Male and Female PY 90 Terminees in the Second Post Program Year?

Characteristic	Gender	
	Male	Female
Intercept	0.373375	0.232451
	4.957	*3.588*
Age 18 - 21	-0.006804	-0.25258
	-0.547	*-2.267*
Age 30 - 39	-0.014899	0.003574
	-1.235	*0.332*
Age 40 - 49	-0.026816	0.014943
	-1.614	*0.993*
Age 50 +	-0.050970	-0.083567
	-2.185	*-4.220*
Black	-0.071378	-0.047197
	-5.788	*-4.217*
Hispanic	0.060648	0.054649
	3.613	*3.486*
Dropout	-0.093527	-0.084812
	-8.127	*-7.819*
Post High School Education	0.031628	0.038597
	2.605	*3.815*
2 Person Family	0.019446	0.036012
	1.260	*3.053*
3 Person Family	0.060872	0.049788
	3.804	*3.955*
4 Person Family	0.087576	0.051360
	5.157	*3.559*
5+ Person Family	0.062707	0.039533
	3.958	*2.641*
AFDC Recipient	0.002023	-0.011013
	0.101	*-1.015*
Other Public Assistance Recipient	-0.056136	-0.035164
	-5.186	*-3.549*
Basic Skills Training	0.004182	-0.002266
	0.210	*-0.133*
Occupational Skills Training	0.047324	0.047833
	3.647	*4.250*
On the Job Training	0.045164	0.011562
	3.669	*0.861*
Earnings 2nd Year Prior	0.000009414	0.000010811
	18.959	*19.195*
Substancial Employment at Term	0.031499	0.090420
	1.808	*6.711*
Full Employment at Term	0.167853	0.213299
	16.141	*23.441*
% Families in Poverty - 90 Census	0.001003	-0.001014
	0.594	*-0.723*
Median Rent in Area - 90 Census	-0.007495	-0.001575
	-2.378	*-0.561*
Average Unemployment Rate 1991 - 1992	-0.002846	-0.003456
	-0.882	*-1.202*
Average Area Earnings 1991 - 1992	-0.000034451	-0.000589
	-0.026	*-0.481*
Employment Growth Rate b/t 1990 - 1992	-0.002626	-0.001009
	-1.451	*-0.665*
r-squared	0.09	0.12

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What Factors Explain the Earnings Success of PY 90 Terminees in the First and Second Post Program Year?

Characteristic	Post-Program Year First	Second
Intercep	0.08226 *1.966*	0.302219 *6.1414*
Female	-0.016265 *-2.766*	-0.005565 *-0.804*
Age 18 - 21	-0.041015 *-5.834*	-0.015965 *-1.930*
Age 30 - 39	0.008076 *1.184*	-0.006080 *-0.758*
Age 40 - 49	0.006276 *0.664*	-0.004232 *-0.380*
Age 50 +	-0.032627 *-2.556*	-0.068349 *-4.550*
Black	-0.054615 *-7.801*	-0.059368 *-7.206*
Hispanic	0.019977 *2.056*	0.056190 *4.914*
Dropout	-0.055543 *-8.304*	-0.088073 *-11.188*
Post High School Education	0.041696 *6.319*	0.036029 *4.640*
2 Person Family	0.026796 *3.459*	0.035848 *3.932*
3 Person Family	0.045950 *5.623*	0.059084 *6.143*
4 Person Family	0.053809 *5.875*	0.069227 *6.423*
5+ Person Family	0.045915 *5.044*	0.054159 *5.056*
AFDC Recipient	-0.010278 *-1.325*	-0.006879 *-0.753*
Other Public Assistance Recipient	-0.025193 *-4.071*	-0.045652 *-6.268*
Basic Skills Training	0.006197 *0.564*	0.000587 *0.045*
Occupational Skills Training	0.040844 *5.705*	0.049978 *5.931*
On the Job Training	0.036431 *4.751*	0.032489 *3.600*
Earnings 2nd Year Prior	0.000008123 *25.866*	0.00001006 *27.224*
Substancial Employment at Term	0.023421 *2.584*	0.067260 *6.305*
Full Employment at Term	0.201535 *34.673*	0.193259 *28.253*
% Families in Poverty - 90 Census	-0.002234 *-2.440*	-0.000116 *-0.108*
Median Rent in Area - 90 Census	0.000102 *0.058*	-0.004533 *-2.173*
Average Unemployment Rate 1991 - 1992	0.001472 *0.809*	-0.003153 *-1.473*
Average Area Earnings 1991 - 1992	-0.000158 *-0.206*	-0.000322 *-0.357*
Employment Growth Rate b/t 1990 - 1992	-0.001026 *-1.038*	-0.001710 *-1.470*
r-squared	0.15	0.13

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Chapter III—Successes in Texas

A. Profile of Texas

With 267,338 square miles, Texas, the Lone Star State, occupies almost 7.5 percent of the total United States land area, a region as large as all of New England, New York, Pennsylvania, Ohio and Illinois combined. Texas' physiography include mountains to the west, the Gulf Coast to the south, the Piney Woods to the east, and the Great High Plains to the north.

The Texas Population[1]

The population of Texas is as vast and diverse as its physical geography. Surpassed in population only by California, Texas' population totaled nearly 17 million in 1990. Population increases from 1980 to 1990 in Texas were more than double the national average. Although in previous decades the vast majority of Texas' population growth resulted from net in-migration to the state, over the course of the 1980s, nearly two-thirds was attributable to natural increase, that is births exceeding deaths (Murdock 1994). Population growth is projected to continue at its current rate for the foreseeable future.

Among the most noteworthy demographic characteristics of Texas is its racial/ethnic composition. A larger proportion of the Texas population is non-White than in the nation as a whole. In 1990, the Texas population was 61 percent White, 12 percent Black and 26 percent Hispanic, and 2 percent of persons from other racial/ethnic groups (Figure 3.1). The state's rapid ethnic diversification is not expected to abate. By 2015, more than 50 percent of the population is projected to be non-White, and by 2026, there will be no majority racial/ethnic group in the state (Texas Comptroller of Public Accounts 1992).

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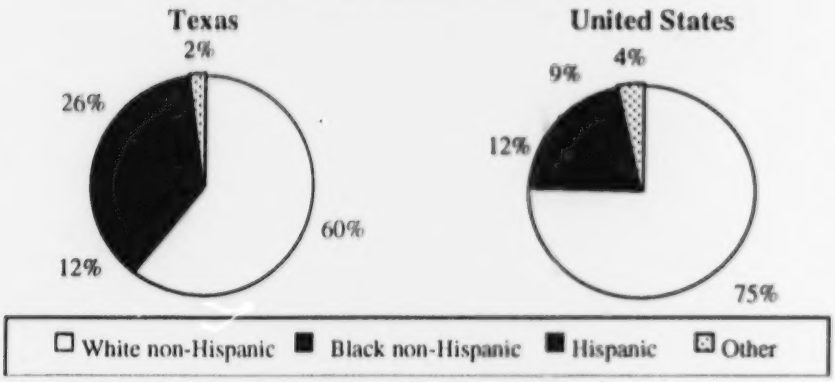
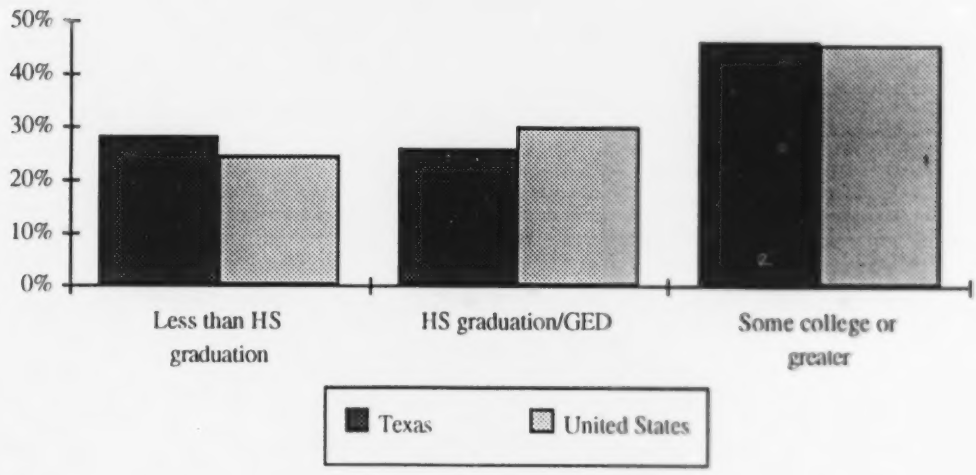
[1]Unless otherwise indicated, figures in this section are CHR calculations from the 1990 Decennial Census of Population and Housing data.

Figure 3.1
Population by Race/Ethnicity
Texas and the United States, 1990



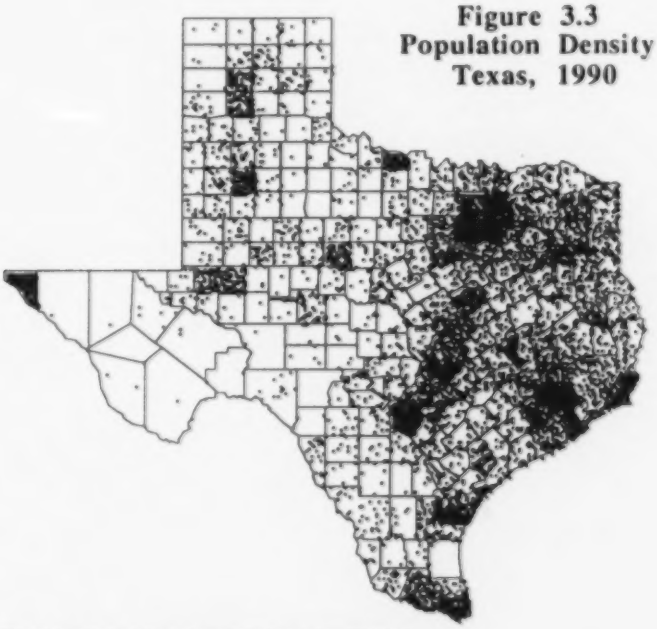
Texas' population is also younger and less educated than that in the nation as a whole. The median age of Texans in 1990 was 30.8 years, compared to 32.8 nationwide. Much of this difference is due to the younger median age of Hispanics who make up a large and growing share of Texas' population. Educational attainment levels show that 28 percent of the Texas adult population (over age 18) had less than a high school education in 1990 compared to only 25 percent for the nation as a whole (Figure 3.2).

Figure 3.2
Educational Attainment
of the Total Population Over Age 18
Texas and the United States, 1990



More than 80 percent of Texans reside within the 49 Metropolitan Statistical Area (MSA) counties, making it a highly urbanized state as well. Three of the nation's ten largest cities are located in Texas: Dallas, Houston, and San Antonio. Yet, despite its predominantly urban character, Texas has vast rural areas with enormous distances between population centers, particularly in the southern and western portions of the state. Fully 196 of the state's 254 counties have a population density of fewer than 50 persons per mile; in 152 counties, the population density is fewer than 25 persons per square mile (Figure 3.3).

Figure 3.3
Population Density
Texas, 1990



Each dot equals one person per square mile.
Source: 1990 Decennial Census of Population and Housing.

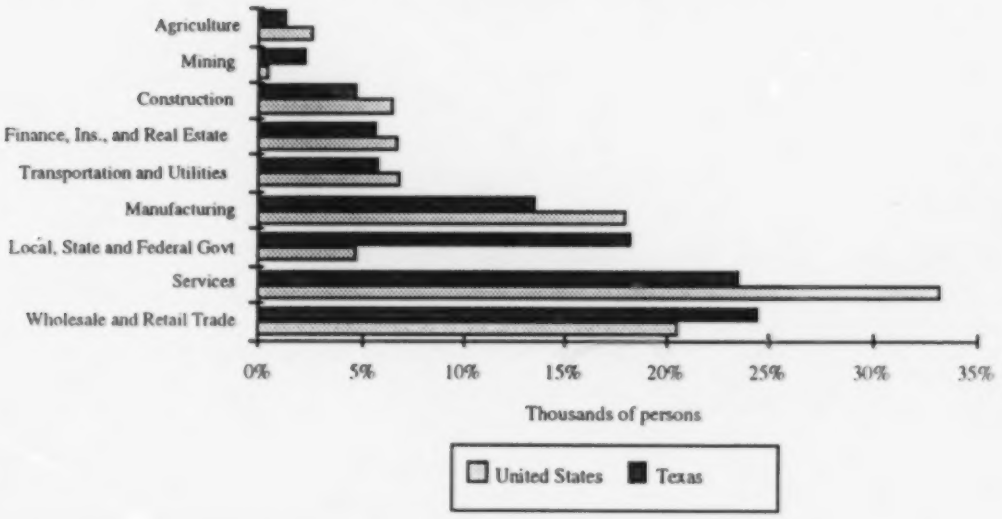
The Texas Economy

Historically, vast petroleum reserves have served as the basis for the state's primary industry. After decades of unprecedented growth and prosperity, the Texas economy encountered hard times in late 1985 with the decline of the oil/gas industry, banking and thrift fails, and free-falling real-estate values. By 1990, the economic tides began to turn and the was state strongly recovering, but the downturn had already ushered in a major restructuring of the Texas economy that continues today. The state's economic strength no longer depends on one booming business, but on rather on its industrial diversity and its ability to compete in a global marketplace.

The economy of Texas is now far less dependent on the energy sector for generating revenues, although the petroleum industry is still a vital part of the state's economy. Manufacturing generated 17 percent of the state's gross revenues in 1990, a smaller share than for the national economy (U.S. Department of Commerce/BEA 1991). Although agricultural revenues make up only two percent of the states total, Texas leads the nation in both the number of farms and in farm acreage. Texas is also among the top three states in the nation for retail sales.

Texas does not have a high concentration of the types of industries which are most sensitive to changing economic conditions. Employment in manufacturing remained relatively stable over the previous decade but comprised only 14 percent of all Texas jobs in 1990 (Figure 3.4). Wholesale and retail trade industries employed the greatest shares of Texans. As nationally, government and service industries have experienced the greatest job growth. These industries are now the state's top job producers.

Figure 3.4
Employment by Industrial Sector
Texas and the United States, 1990



Source: U. S. Bureau of Labor Statistics, Employment and Earnings, 1991.

In part as a result of the state's economic recession, and in part due to the shift toward service industry employment, the years leading up to and including 1990 were difficult times for Texans. Median household, family, and non-family income and per capita income in 1990 were all lower in Texas than in the United States as a whole. Income growth from 1979 to 1989 was also less than nationwide.

In 1990, 6.2 percent of all workers in Texas were unemployed, compared to 5.5 percent of workers nationally. Seventeen counties experienced double-digit unemployment rates; seven of those counties—primarily in the border region—had jobless rates greater than 15 percent (Figure 3.5). In the years following 1990, Texas' unemployment rates fell well below those of the U.S. as a whole, as 1990 marked the end of the Texas recession but the beginning of a major national economic downturn.

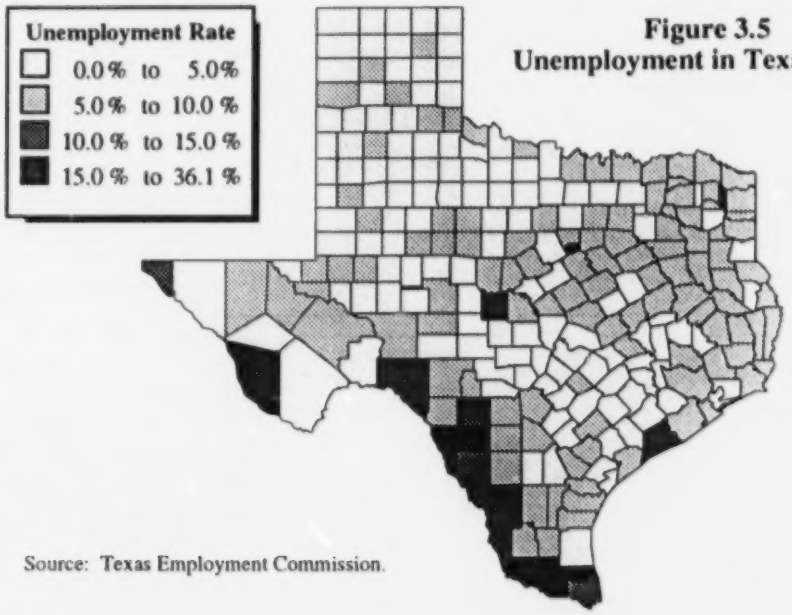


Figure 3.5
Unemployment in Texas, 1990

Source: Texas Employment Commission.

Poverty rates also increased substantially and faster than those for the nation during the late 1980s. In 1990, 18.1 percent of all Texas were impoverished compared to 13.1 nationally. Among Texas families, 14.1 percent of lived in poverty compared to 10.0 percent of all families nationally. Poverty was particularly acute among children and families headed by single mothers. In 1990, 24.3 percent of all Texas children under 18 were living in poverty, and 43.6 percent of all female-headed households with children were poor. Similarly, non-White Texans experienced high levels of poverty in 1990 with 33.0 percent of Hispanics and 31.0 percent of Blacks living in poverty. Geographically, the highest rates of poverty were experienced in the border regions of south Texas, areas with concentrations of Hispanic residents. Over one in three residents of the border region live in poverty, and among children living in border counties, one in two are impoverished.

The JTPA Program in Texas

The JTPA program in Texas is administered at the state level by the Texas Department of Commerce, Workforce Development Division. Local operations, including the development, coordination and delivery of training programs are overseen by Private Industry Councils (PICs) in 35 Service Delivery Areas throughout the state (Figure 3.6). Each PIC is comprised of representatives of the private sector, education agencies, rehabilitation agencies, organized labor, economic development agencies and community-based organizations selected by SDA chief elected officials.

Title IIA, the core training program for adults and youths, is the largest JTPA program. Texas Title IIA programs received just over $119 million in PY1990, 78 percent of which was passed through to local programs by federal formula for the provision of training and related services. This level of funding represented a significant drop from the previous year (Texas State Job Training Coordinating Council 1991). Texas JTPA IIA funding peaked in the late 1980s and has been declining since, as the national recession, in tandem with the JTPA allocation formula, shifted money to states in the eastern and western parts of the U.S.

Some 67,122 individuals were served in Title IIA programs in PY1990, an 11 percent decline from the previous year, the result both of fewer program dollars and a movement away from low-cost, "quick-fix" strategies. Of the 50,694 terminations from the IIA program, 48 percent were to employment.

Performance Policies and Orientation[2]

The Texas JTPA program assesses its operations using the national Performance Standard Model developed by the U.S. Department of Labor. Six performance measures were used in 1990 (Table 3.1). These standards, newly established by DOL for PY1990, represented a philosophical shift toward measuring program performance based more on postprogram outcomes rather than simply on termination-based measures. Measurement of performance for Texas SDAs is based on follow-up data gathered by telephone interviews with a sample of former participants by the Public Policy Research Laboratory at Texas A&M University.

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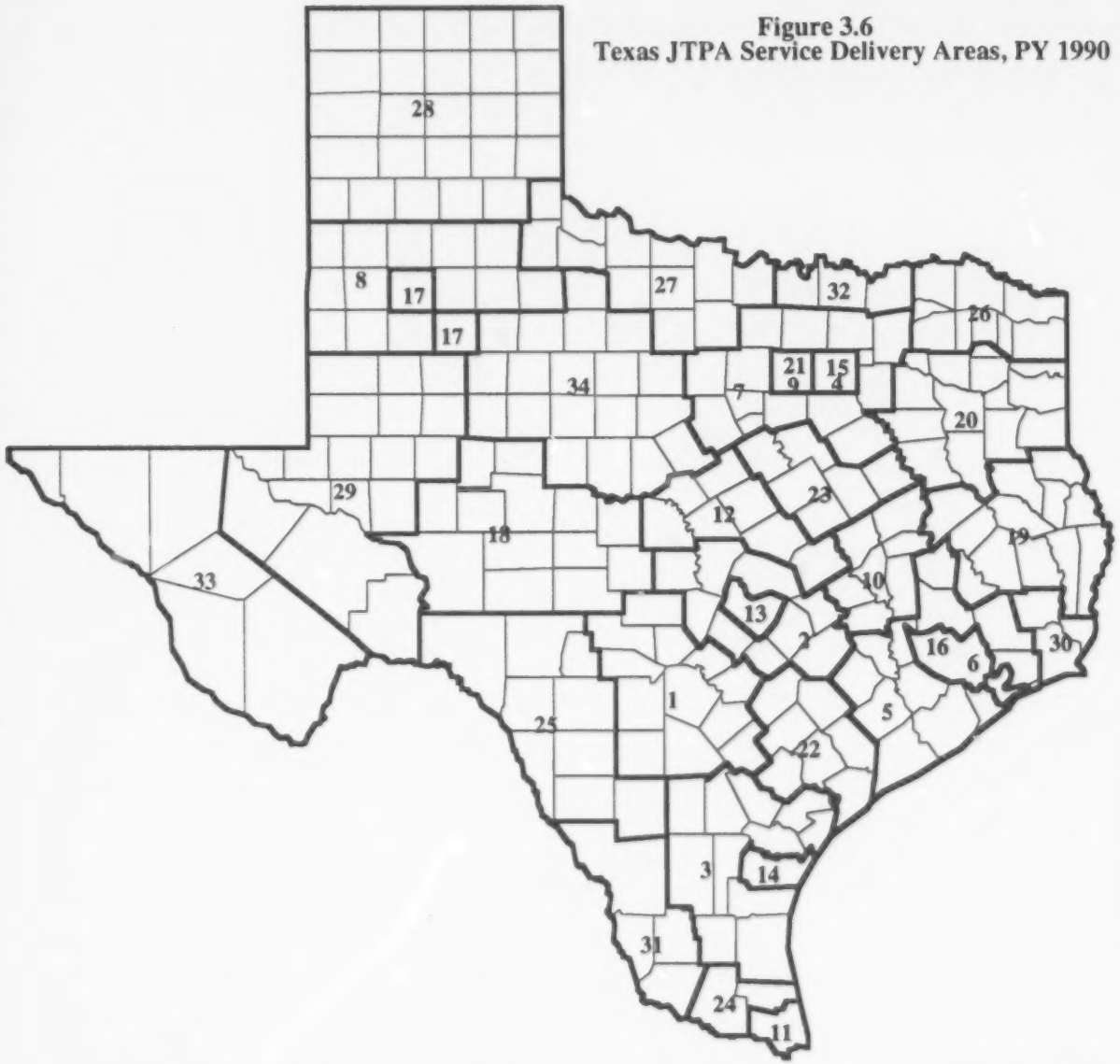
[2]Unless otherwise indicated, data for this section was drawn from Briefing Materials prepared for the September 1991 meeting of the State Job Training Coordinating Council.

Figure 3.6
Texas JTPA Service Delivery Areas, PY 1990



Service Delivery Areas

1 Alamo
2 Rural Capital Area
3 Rural Coastal Bend
4 Balance of Dallas County
5 Gulf Coast
6 Balance of Harris County
7 North Central Texas
8 South Plains
9 Balance of Tarrant County
10 Brazos Valley
11 Cameron County
12 Central Texas
13 City of Austin/Travis County
14 City of Corpus Christi/Nueces County
15 City of Dallas
16 City of Houston
17 Lubbock/Garza County
18 Concho Valley
19 Deep East Texas
20 East Texas
21 Fort Worth Consortium
22 Golden Crest
23 Heart of Texas
24 Hidalgo/Willacy Counties
25 Middle Rio Grande
26 North East Texas
27 North Texas
28 Panhandle
29 Permian Basin
30 Southeast Texas
31 South Texas
32 Texoma
33 Upper Rio Grande
34 West Central Texas

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Table 3.1
U.S. Department of Labor
JTPA Title IIA Performance Standards

Performance Measure	National Minimum Acceptable Performance Standard	Texas' Statewide Performance	Confidence Interval	Weight of Standard for Incentive Award
Adult Follow-up Employment Rate	62%	63%	3.2	10%
Adult Follow-up Weekly Earnings	$204	$245	$12	10%
Adult Welfare Follow-up Employment Rate	51%	51	4.7	20%
Adult Welfare Follow-up Weekly Earnings	$182	$202	$13	20%
Youth Entered Employment Rate	33%	39%	4.5	20%
Youth Employability Enhancement Rate	45%	51%	5.2	20%

Source: Texas SJTCC Briefing Materials, September 1991.

Each state's governor is granted the discretion to establish additional standards to reflect state policy, to make further adjustments to SDA standards, and to develop innovative incentive policies. As authorized by DOL, in PY 1990 Governor Ann Richards did make adjustments to the national standards for all Texas SDAs, taking into consideration the effects of economic factors, labor market conditions, characteristics of the population to be served, geographic factors on the SDA's ability to perform.

Performance standards also provide the basis for the Governor to grant performance awards, target technical assistance and assess the need for SDA reorganization. Six percent of the state's Title IIA allocation may be used to finance the awarding of performance incentive grants to SDAs that exceed their adjusted performance standards. To be eligible to receive such an award in Texas, SDAs must have met (within the allowable confidence interval) or exceeded at least four of the six standards.

SDAs exceeding adjusted standards receive proportionately more incentive funds based on the degree to which they perform. SDAS performing above the upper confidence interval, i.e., performing above the adjusted standard plus the tolerance range are designated as Tier I. SDAs performing at least 15 percent above the adjusted standard are designated as Tier II.

As permitted by DOL, additional bonus awards were made available by Governor Richards to SDAs with large shares of AFDC recipients and high school dropouts and to SDAS with adult skills training completion rates which exceeded 50 percent. The policy was implemented to encourage focusing scarce training resources on "harder-to-serve"

populations. By including these measures in its overall incentive awards formula in PY 1990, Texas pre-dated a similar mandate put forth in the JTPA Amendments of 1992.

In PY 1990, 34 of the 35 SDAs qualified for incentive awards at some level based on their performance against DOL standards. Five SDAs (Alamo, Brazos Valley, Central Texas, City of Houston, and Harris County) each exceeded all six standards. Although nine SDAs failed one or more standards, no SDA failed the same standard for two consecutive years, and therefore no SDA was subject to reorganization.

Characteristics of the Study Population

The demographic and employment characteristics of PY 1990 Texas JTPA Title IIA Adult and Out-of-School Youth Terminees are presented in Table 3.2. The majority of the 24,919 terminees included studied were female (60.3 percent).[3] They also tended to be young, with approximately 60 percent under 30 years of age. Fully 30 percent were out-of-school youth.

More than two-thirds of terminees were non-white. Hispanics made up the largest racial/ethnic group of terminees by far, accounting for almost 45 percent. Whites made up fewer than a third of all terminees; slightly fewer than one in four terminees were Black.

Although the largest share of terminees had completed high school or received a GED, almost as many (40.5 percent) had not graduated from high school.

More than half of all Texas JTPA terminees had some parental responsibility, with 32 percent being single parents and another 23.5 percent parents in two-parent families. Terminees also tended to live in large families. The vast majority of terminees lived with at least one other family member. Nearly 40 percent lived in families with four or more members.

Almost 22 percent of all JTPA terminees were AFDC recipients at enrollment; one-half received some other form of public assistance, including Food Stamps, Refugee Cash Assistance or Supplemental Security Income. However, these categories are not mutually exclusive, in that nearly all AFDC recipients also receive Food Stamps.

Title IIA programs may include pre-employment skills training classroom training, work experience, placement assistance, on-the-job training (OJT) and other support services needed to remove barriers to employment such as transportation and child care. Keeping with the national trend begun in PY 1987, Texas SDAs emphasized longer-term, more intensive interventions for its participants during PY 1990. Basic Skills Training (33 percent) was the most common major program activity undertaken by PY 1990 Texas JTPA terminees. Marginally smaller shares were enrolled in Occupational Skill Training

[3]In-school youth, those with fewer than seven days' program participation and those for whom insufficient (fewer than four) preprogram UI wage quarters were available were excluded from the study population.

Table 3.2
Characteristics of Texas JTPA Title II-A
Adult and Out-of-School Youth Terminees, PY 1990

Characteristic	Percent
Gender	
Male	39.7%
Female	60.3%
Age Group	
18-21	30.1%
22-29	30.7%
30-39	26.0%
40-49	9.9%
50+	3.2%
Race/Ethnic	
White/Other	31.4%
Black	24.0%
Hispanic	44.6%
Education	
Less than high school	40.5%
High school/GED	48.8%
More than high school	10.7%
Family Status (Texas only)	
Single parent	31.9%
Parent in two-parent family	23.5%
Other family member	20.8%
Nondependent individual	23.9%
Persons in family	
1	23.0%
2	17.6%
3	20.7%
4	17.0%
5 or more	21.7%
Welfare Status	
AFDC recipient	21.5%
Other public assistance	50.0%

Table 3.2 (cont.)

Characteristic	Percent
Major program activity	
Basic skills training	32.9%
Occupational skill training	28.5%
On the job training	27.8%
Job search assistance	5.1%
Other	5.6%
Pre-program work history	
Earnings first year prior	$ 936
Earnings second year prior	$ 761
Average quarters employed - first year	1.8
Average quarters employed - second year	1.8
Termination Status	
Not employed at termination	26.3%
Minimal employment at termination	1.4%
Substantial employment at termination	12.9%
Full-time employment at termination	59.3%
Occupation at Termination	
Management/administration	1.4%
Professional	7.1%
Sales	8.9%
Clerical	22.3%
Service	25.7%
Agriculture	1.7%
Precision production	10.8%
Operator	22.1%
Industry at Termination	
Agriculture	1.4%
Mining	0.7%
Construction	6.1%
Manufacturing	15.8%
Transportation, Electric, Gas, etc.	5.2%
Retail	18.4%
Finance, Insurance, Real Estate	2.6%
Services	40.8%
Other	9.0%
Percent of Total JTPA Title IIA	
Adult and Youth Terminees	100%
n	24,919

(29 percent) and OJT (28 percent). Job Search Assistance was the program activity for relatively few terminees during this period.

Recent work experience was limited for these PY 1990 terminees. On average, terminees were employed for fewer than two full quarters in each of the two years preceding enrollment in JTPA. Average pre-enrollment earnings also were quite low in both years (under $1,000), although they were slightly higher in the year immediately preceding JTPA enrollment.

Almost three quarters of this population were reported as employed at termination from the JTPA program; of the employed terminees, roughly four out of five were employed full-time (at least 35 hours per week). Seventy percent of all terminees with a job at termination were clustered into three major occupational groups: Clerical, Service and Operator/Laborer occupations. And, three-quarters were employed in one of three major industry categories: Service, Manufacturing and Retail Trade. Service industry jobs were the most common, accounting for almost 41 percent of all employment at termination.

Characteristics for male and female terminees are presented in Table 3.3. For some of the major demographic characteristics, male and female terminees appear to be quite similar, including age, race/ethnicity (slightly more females are minorities) and education. However, for many of the others, male and female differences are marked.

Family status and size differences are particularly sharp, and these characteristics are expected to influence participation patterns as well as pressures to work. Nearly 71 percent of female terminees are parents, and 51 percent are single parents. This is in sharp contrast to male terminees, fewer than one-third of whom are parents, and most of those were parents in two-parent families. Female JTPA participants in Texas are shouldering far greater burdens in terms of family support obligations than are males. In addition, there are family size differences for males and females which reflect the variations in family status. Female participants are part of much larger families: almost two thirds of female terminees are in families with three or more family members, compared to only one half of the males.

Not surprisingly, especially given that Texas only implemented its AFDC-UP program in October 1990 and that most male terminees had no parental responsibilities, male tended not to be on public assistance in any form. Female terminees were about eight times more likely to be on AFDC and about twice as likely to be receiving other forms of public assistance (i.e., Food Stamps, SSI or Refugee Cash Assistance) than were males.

Table 3.3
What Differences Were There Between Male and Female
PY 1990 Texas JTPA Title II-A
Adult and Out-of-School Youth Terminees?

Characteristic	Male	Female
Age Group		
18-21	31.0%	29.6%
22-29	29.0%	31.9%
30-39	26.1%	26.0%
40-49	10.4%	9.5%
50+	3.5%	3.1%
Race/Ethnic		
White/Other	33.0%	30.3%
Black	20.7%	26.1%
Hispanic	46.3%	43.5%
Education		
Less than high school	41.5%	39.9%
High school/GED	47.1%	50.0%
More than high school	11.4%	10.2%
Family Status (Texas only)		
Single parent	3.0%	50.9%
Parent in two-parent family	29.1%	19.7%
Other family member	28.2%	15.9%
Nondependent individual	39.6%	13.5%
Persons in family		
1	38.2%	12.9%
2	11.9%	21.4%
3	15.6%	24.1%
4	13.7%	19.2%
5 or more	20.7%	22.3%
Welfare Status		
AFDC recipient	4.3%	32.8%
Other public assistance	34.9%	60.0%

Table 3.3 (cont.)

Characteristic	Male	Female
Major program activity		
Basic skills training	28.4%	35.8%
Occupational skill training	23.2%	32.1%
On the job training	37.9%	21.2%
Job search assistance	4.9%	5.3%
Other	5.7%	5.6%
Pre program work history		
Earnings first year prior	$ 1,578	$ 621
Earnings second year prior	$ 1,258	$ 534
Average quarters employed - first year	2.0	1.7
Average quarters employed - second year	1.9	1.7
Termination Status		
Not employed at termination	22.2%	29.1%
Minimal employment at termination	0.8%	1.8%
Substantial employment at termination	9.7%	15.1%
Full-time employment at termination	67.4%	54.0%
Occupation at Termination		
Management/administration	1.4%	1.5%
Professional	4.2%	9.3%
Sales	6.1%	11.0%
Clerical	7.9%	32.6%
Service	21.2%	29.0%
Agriculture	3.2%	0.6%
Precision production	22.3%	2.4%
Operator	33.8%	13.7%
Industry at Termination		
Agriculture	2.3%	0.8%
Mining	1.2%	0.4%
Construction	12.5%	1.5%
Manufacturing	20.2%	12.7%
Transportation, Electric, Gas, etc.	7.1%	3.8%
Retail	16.8%	19.5%
Finance, Insurance, Real Estate	1.1%	3.7%
Services	28.3%	49.8%
Other	10.6%	7.8%
Percent of Total JTPA Title II-A		
Adult and Out-of-School Youth Terminees	100.0%	100.0%
n	9,902	15,017

Male terminees also were far more likely to have been enrolled in OJT (38 percent) as their major program activity than were females (21 percent), while females tended to have been enrolled in Basic Skills (36 percent) and Occupational Skills Training (32 percent). While issues have been raised in recent years concerning the utility of stand-alone Job Search Assistance, few male or female terminees enrolled in this activity.

Prior work history is a variable which has been singled out as having considerable influence on postprogram success, both net and gross (Ashenfelter 1978, Bassi 1987). Here, it is clear that, regardless of which preprogram year is examined, males had a very sizeable work and earnings advantage over females upon entering JTPA. In both the first and second preprogram years, males worked more quarters on average and posted median UI earnings more than double those of their female counterparts. While absolute earnings levels for male and female participants were higher in the year immediately preceeding program enrollment than in the earlier year, the ratio of their earnings was essentially unchanged.

Turning to termination status, female terminees were less likely to be employed at termination than were males, and if employed, were more likely to be employed on a less-than-full-time basis (i.e., 35 or more hours per week). More than 67 percent of male terminees were employed full time, compared to just 54 percent of females. Note that JTPA administrative records do not shed any light on the reasons for taking part-time employment at termination. There is no way of knowing the extent to which working part-time may have been voluntary.

Finally, even a cursory examination of the types of termination jobs male and female terminees were employed in—whether full- or part-time—reveals marked differences. By occupation, male terminees were employed disproportionately in Operator, Precision Production and, to a lesser extent in Agriculture. A substantial share of the men (22 percent) also worked in Service occupations, however, females were employed in Service jobs at a higher rate (almost 29 percent). Generally, female terminees were found disproportionately in Clerical, Service, Sales and Professional occupations. Male terminees were also disproportionately employed in the traditional Goods-producing industries—Manufacturing, Agriculture, Construction and Mining—as well as Transportation and Public Utilities; a large share of male terminees worked in the Services industry (28 percent), but at a rate far below that of females (almost 50 percent). Female terminees tended to be employed disproportionately in the Services, Retail and FIRE industries.

B. Descriptive Results

This section first presents the actual rates of success for all PY1990 Texas JTPA Title IIA terminees, focusing on two success measures: strict-steady employment—employment in all four quarters during a year with earnings equivalent to at least 20 hours of work at the federal minimum wage, characterized here as continuous employment; and earnings greater than 155 percent of poverty. Again, important exclusions made from the study data were in-school youth; those with fewer than seven days' participation in an activity; co-enrollees in other JTPA titles/subparts (e.g., Title III); and terminees whose initial enrollment dates precluded having sufficient preprogram UI earnings data.

Employment Success

Continuous (strict-steady) employment success rates are presented in Table 3.4. Overall, nearly 35 percent of PY1990 adult and out-of-school youth terminees were employed continuously in each of the two available postprogram years. And, with some notable exceptions, employment success rates were largely unchanged from the first to the second postprogram year.

Employment success rates were only marginally higher for males than females in each year. By age group, youth tended to have lower continuous employment success rates than adults of all ages. In terms of race/ethnicity, Whites/Others and Hispanics tended to have success rates greater than Blacks in each year.

Education appeared to convey a substantial advantage for continuous employment rates, particularly for the jump from less than a high school diploma to having the diploma or a GED: only 23-24 percent of those without the diploma were continuously employed by this relatively strict measure, compared to more than 41 percent for those with. While employment success rates rose again for those with some postsecondary education (to 46-48 percent), the increase was less marked.

The key difference in continuous employment rates by family status and size is that terminees who were parents in 2-parent families had the highest success rates (around 41 percent), compared to 32-33 percent for all others. The rates of employment success varied little by size of family.

Terminees receiving some form of public assistance at enrollment generally had lower continuous employment rates postprogram. Those on AFDC had the lowest rates (25-26 percent), while terminees on Other Public Assistance had rates closer to the all-terminee average.

Table 3.4
What Percent of PY 1990 Texas JTPA Title II-A Adult and Out-of-School Youth Terminees Were Continuously Employed During the First and Second Postprogram Years?

Characteristic	Post-Program Year First	Second
Gender		
Male	36.3%	36.2%
Female	33.5%	33.7%
Age Group		
18-21	26.9%	28.4%
22-29	37.3%	36.9%
30-39	38.4%	37.6%
40-49	38.8%	39.2%
50+	37.3%	34.7%
Race/Ethnic		
White/Other	37.5%	36.5%
Black	29.2%	30.2%
Hispanic	35.5%	35.2%
Education		
Less than high school	22.8%	24.0%
High school/GED	41.4%	41.0%
More than high school	47.8%	46.3%
Family Status (Texas only)		
Single parent	32.8%	33.2%
Parent in two-parent family	41.2%	41.1%
Other family member	31.5%	32.0%
Nondependent individual	33.2%	32.5%
Persons in family		
1	33.5%	32.8%
2	34.3%	33.8%
3	35.2%	35.7%
4	34.9%	35.4%
5 or more	35.2%	35.8%
Welfare Status		
AFDC recipient	25.3%	25.8%
Other public assistance	31.2%	31.7%

Table 3.4 (cont.)

Characteristic	Post-Program Year First	Second
Major program activity		
Basic skills training	20.2%	23.1%
Occupational skill training	41.8%	42.5%
On the job training	44.4%	39.8%
Job search assistance	36.3%	38.0%
Other	31.9%	33.3%
Pre-program work history		
Earnings first year prior	$ 2,406	$ 2,343
Earnings second year prior	$ 2,093	$ 2,052
Average quarters employed - first year	2.2	2.2
Average quarters employed - second year	2.2	2.2
Termination Status		
Not employed at termination	16.8%	21.1%
Minimal employment at termination	17.4%	23.7%
Substantial employment at termination	28.9%	31.4%
Full-time employment at termination	44.2%	41.6%
Occupation at Termination		
Management/administration	39.8%	38.6%
Professional	61.0%	59.8%
Sales	35.8%	35.1%
Clerical	45.4%	44.7%
Service	35.0%	34.1%
Agriculture	27.3%	28.9%
Precision production	40.1%	38.4%
Operator	40.7%	37.3%
Industry at Termination		
Agriculture	25.1%	25.5%
Mining	44.2%	44.2%
Construction	33.8%	31.3%
Manufacturing	45.2%	42.0%
Transportation, Electric, Gas, etc.	40.9%	39.7%
Retail	37.2%	33.7%
Finance, Insurance, Real Estate	44.8%	43.6%
Services	42.6%	41.6%
Other	46.0%	43.9%
Percent of Total JTPA Title II-A		
Adult and Out-of-School Youth Terminees	34.6%	34.7%
n	24,919	24,919

There were marked differences in continuous employment rates by major program activity, and these rates also tended to vary more from the first to the second postprogram year. Employment success rates in the first year post were highest for those in OJT and OST (42-45 percent), followed by JSA and Other (32-36 percent); BST (20 percent) was far below the other activity success rates. By the second postprogram year, however, the rankings had changed somewhat, as the range between these rates narrowed slightly. In the second year, the success rate for OST was essentially unchanged, while OJT's slipped by nearly five percentage points. Success rates for those in JSA and Other also rose marginally, while those for BST rose by three points.

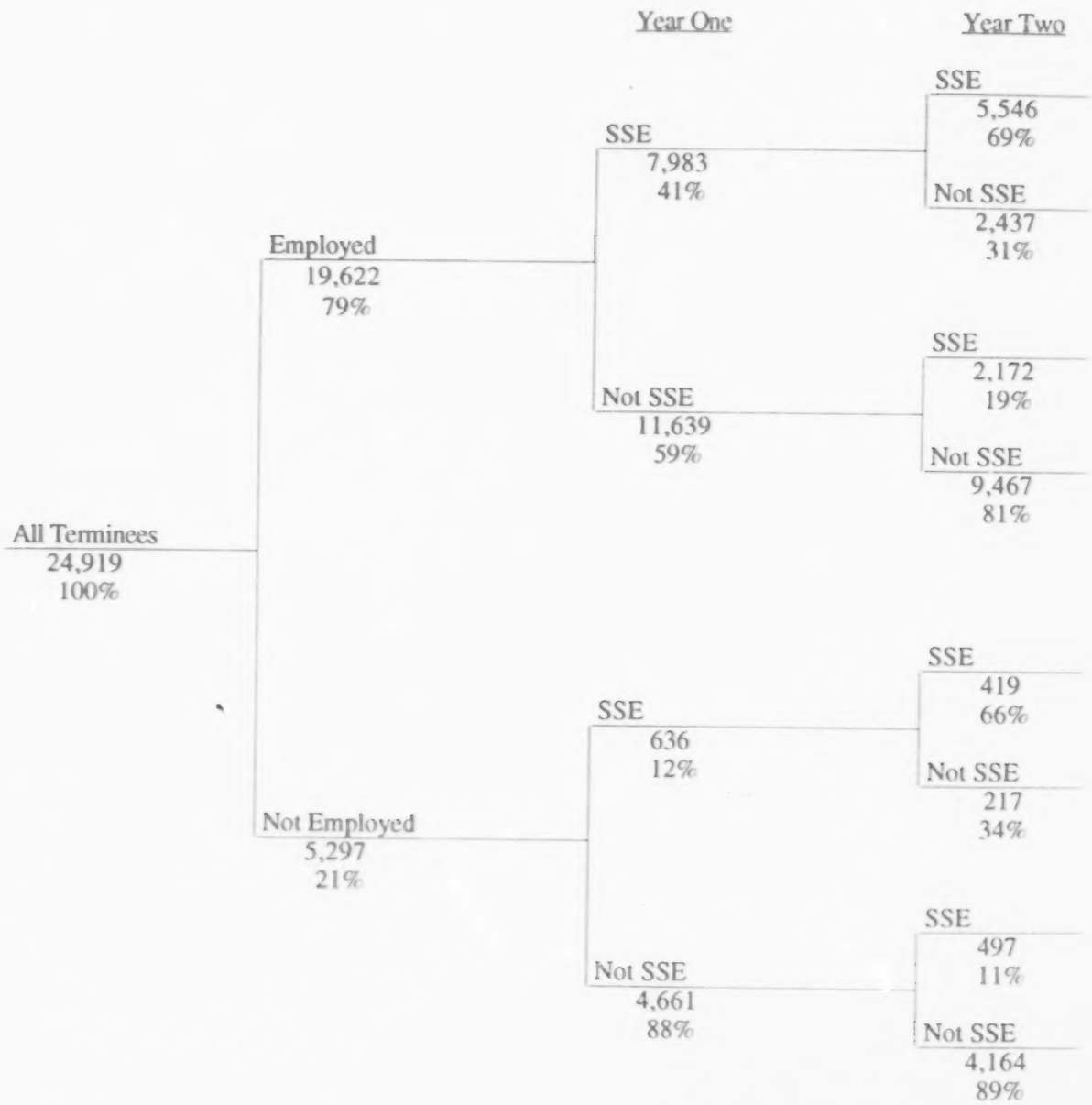
Median preprogram earnings for successful terminees were 1.8-2.4 times those of all terminees, and, by inference, were much greater than two times the earnings of unsuccessful terminees (as reported earlier in Table 3.2). Successful terminees also had noticeably more preprogram work quarters on average (with 2.2 quarters).

Securing a full-time job at termination apparently conveyed a sizable advantage over those with either substantial part-time employment (15 points) or minimal or no employment (about 27 points). However, the size of this advantage shrunk markedly by the second postprogram year; still, those employed full-time at termination were 10 percentage points more likely to be continuously employed in the second year than those with only substantial part-time jobs, and 18-20 points more likely to succeed than those with little or no employment.

Moreover, continuous employment success was far more likely if the termination job were in a Professional or Clerical occupation and in a fairly broad range of industries. Those with the lowest expectations for continuous employment were employed in the more seasonal occupations (e.g., Agriculture, Service and Sales) and industries (e.g., Agriculture, Construction and Retail).

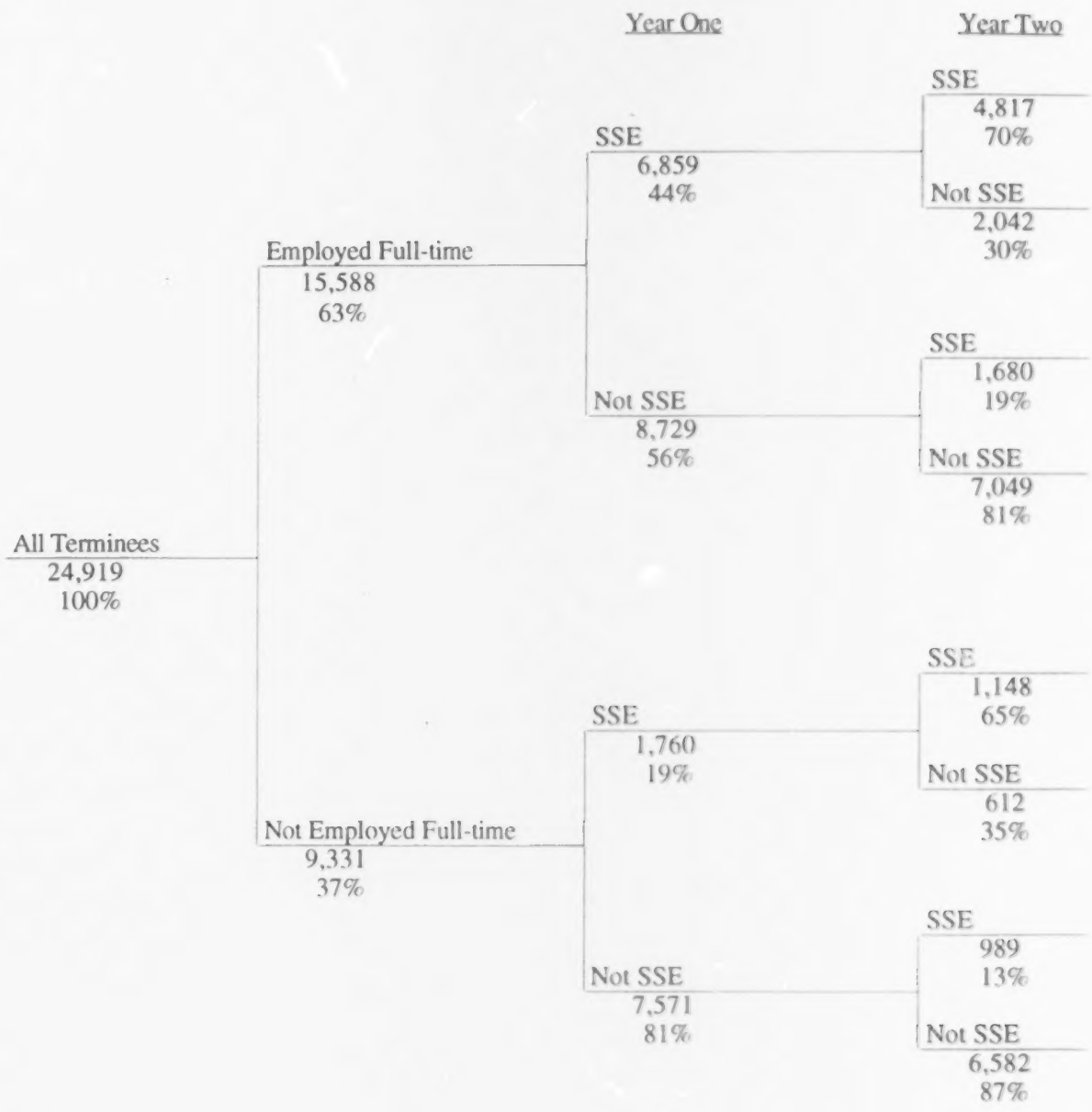
The importance of employment status at termination can also be demonstrated by means of a series of transition "branching" diagrams. Figure 3.7 shows the percentage of terminees, both those employed and those unemployed at termination, who were continuously (strict-steady) employed in first year one and then year two. Of those who were employed at termination, 41 percent were employed continuously in the first year; and 69 percent of those were continuously employed in the second postprogram year as well. In sharp contrast, of those who were unemployed at termination, only 12 percent were continuously employed in year one, although 66 percent of these first-year successes were continuously employed in year two. All told, nearly 90 percent of second-year employment successes held jobs at termination.

Figure 3.7
Strict Steady Employment
Employment at Termination



A very similar picture emerges when the transitions are computed for those who had a full-time job at termination compared to those who did not (Figure 3.8). Some 44 percent of those terminating with a full-time job experienced continuous employment in the first postprogram year; and of those first-year successes, 70 percent were also successful in the second year. Those unemployed or with less-than-full-time employment at termination had rates of 19 and 65 percent, respectively. Three-quarters of all second-year employment successes had held full-time jobs at termination.

Figure 3.8
Strict Steady Employment
Full-time Employment at Termination



Earnings Success

Using earnings above 155 percent of the federal poverty level as the measure evokes a very different picture of success (Table 3.5). Not only are the rates of success lower in each of the two postprogram years, but there is a modest but clear upward trend for earnings success. The all-terminee earnings success rate is 22.3 percent for the first year, rising to almost 25 percent for the second year.

Earnings success rates were 8 points higher for males than females in each year, with both showing increases in the second year. Males' generally higher wages in the labor market likely provide a large part of the explanation for this difference, given that observed gender differences in employment success rates were quite small.

As with the employment success pattern, adults clearly fare better than out-of-school youth, although youth and adults alike posted higher success rates in year two. The largest age-related success rate increase (about ten percentage points) occurred in moving from under 21 years to 22-29 years. Earnings success rates were actually lower for the 50+ age group than those for other adults.

In marked contrast to employment success, Whites/Others had much higher earnings success rates (30-31 percent) than either Hispanics or Blacks; Hispanic earnings success rates were only slightly above those for Blacks in each year. Apparently, while Hispanics achieved consistently high employment rates (even using the earnings and employment intensity screening criteria), their wages were sufficiently low that their earnings success rates approached those for Blacks. All race/ethnic groups posted modest success rate increases in the second year.

The pattern of earnings success by years of education completed is notably similar to that for continuous employment. There is a very clear pattern of increasing success with higher levels of education, particularly moving from less than to just a high school education. However, there are substantial rate increases moving from high school to some post-high school education as well. Those with post-high school education have some of the highest earnings success rates observed (39-41 percent). All education groups had higher success rates in the second year.

Some of the same patterns observed for employment success by family status and size are present here. Parents in 2-parent families succeeded at rates much higher (29-32 percent) than other terminee groups, although nondependent individuals succeeded at rates noticeably higher than single parents and other family members. There was no clear pattern of earnings success by family size. Earnings success rates increased in year two regardless of family status or size.

Table 3.5
What Percent of PY 1990 Texas JTPA Title II-A Adult and Out-of-School Terminees Had Earnings that Exceeded 155 Percent of Poverty During the First and Second Postprogram Years?

Characteristic	Post-Program Year First	Second
Gender		
Male	27.3%	29.1%
Female	19.1%	22.0%
Age Group		
18-21	13.8%	17.3%
22-29	24.5%	27.1%
30-39	27.4%	29.1%
40-49	27.6%	29.7%
50+	23.4%	24.0%
Race/Ethnic		
White/Other	29.9%	31.1%
Black	18.1%	20.8%
Hispanic	19.3%	22.6%
Education		
Less than high school	11.7%	14.0%
High school/GED	27.5%	30.4%
More than high school	39.2%	40.6%
Family Status (Texas Only)		
Single parent	19.7%	22.0%
Parent in two-parent family	28.8%	32.0%
Other family member	17.6%	20.5%
Nondependent individual	23.7%	25.2%
Persons in family		
1	24.2%	25.6%
2	20.7%	23.3%
3	22.3%	25.1%
4	22.3%	25.7%
5 or more	21.6%	24.3%
Welfare Status		
AFDC recipient	13.1%	14.5%
Other public assistance	17.7%	20.3%

Table 3.5 (cont.)

Characteristic	Post-Program Year First	Second
Major program activity		
Basic skills training	10.3%	13.1%
Occupational skill training	31.9%	34.9%
On the job training	27.5%	28.6%
Job search assistance	18.4%	25.1%
Other	21.8%	23.2%
Pre-program work history		
Earnings first year prior	$ 3,075	$ 2,940
Earnings second year prior	$ 2,961	$ 2,874
Average quarters employed - first year	2.3	2.3
Average quarters employed - second year	2.3	2.3
Termination Status		
Not employed at termination	10.0%	13.1%
Minimal employment at termination	9.7%	12.8%
Substantial employment at termination	11.3%	16.7%
Fulltime employment at termination	30.5%	32.1%
Occupation at Termination		
Management/administration	29.7%	29.7%
Professional	56.5%	56.8%
Sales	13.3%	16.6%
Clerical	30.5%	33.8%
Service	15.9%	19.5%
Agriculture	12.4%	16.5%
Precision production	33.4%	33.6%
Operator	29.0%	30.1%
Industry at Termination		
Agriculture	15.6%	20.2%
Mining	45.0%	42.6%
Construction	32.3%	31.3%
Manufacturing	32.5%	33.4%
Transportation, Electric, Gas, etc.	31.5%	32.2%
Retail	13.6%	17.7%
Finance, Insurance, Real Estate	33.4%	33.8%
Services	27.7%	30.7%
Other	30.8%	32.5%
Percent of Total JTPA Title II-A		
Adult and Out-of-School Youth Terminees	22.3%	24.8%
n	24,919	24,919

Not surprisingly, earnings success rates for those who were receiving public assistance at enrollment tend to be lower than for all terminees, and this is particularly true for AFDC recipients (at 13-14 percent).

The pattern for earnings success by major program activity is broadly similar to that for employment. It is worth noting that, in contrast to the employment results, earnings success rates for terminees in all major activity groups increased in the second year post. Terminees from OST clearly ranked on top in year one (and year two) postprogram, followed by those from OJT, Other and JSA, all of which were separated by several percentage points; BST terminees fared much worse, bringing up the bottom ranking with only a 10.3 percent earnings success rate. By the second year post, OST and BST still held the top and bottom rankings respectively, while JSA jumped almost seven points, surpassing Other for third place. This second year improvement in JSA earnings success rates was somewhat surprising.

As with employment, preprogram earnings appeared to make a considerable difference for postprogram earnings success, even more so than for employment success. Median prior earnings for terminees who succeeded in terms of earnings were 2.2-3.1 times earnings for all-terminees, and by inference, exceeded the earnings of unsuccessful terminees by an even greater margin. Average preprogram work quarters in the first and second year prior to enrollment for successful terminees were 1.2-1.3 times greater than for all terminees, much like the employment success pattern.

From examining success rates by terminee status at termination, it appears that only having a full-time job was particularly advantageous. While those with full-time employment had success rates of 31-32 percent in both years, in the first year there was little difference in success between those who took part-time jobs and those who were unemployed. By year two, those with at least a half-time job had begun to gain over unemployed and minimally employed terminees, but they still had earnings success rates more than 15 points lower than those exiting the program with full-time jobs.

The type of termination job appears to make a real difference for earnings success as well as for employment success. The highest success rates (57 percent in both years) were posted by terminees employed in Professional occupations at termination. Several others—Precision Production, Clerical, Management/Administration and Operators—had success rates which were above the all-terminee average with rates in the high 20s and low 30s. Seasonal occupations such as Agriculture and Sales were at the bottom. A similar picture holds for the industry of the termination job. Jobs in the seasonal Agriculture and Retail industries had below average earnings success rates, while Mining, an industry which accounted for very few jobs overall, had the highest rates.

The effects of termination employment status on earnings success can also be shown by their postprogram success transition rates. As Figure 3.9 shows, 27 percent of those employed at termination earned more than 155 percent of poverty in their first postprogram year; and, of those, fully 74 percent also were successful in terms of earnings in the second year as well. Those not employed at termination did not fare nearly as well. Only 7 percent of those unemployed at termination were successful in year one, although 69 percent of these extended their earnings success into year two. Nearly 92 percent of year-two earnings successes had held a job at termination.

Holding full-time jobs at termination from JTPA was even more important for postprogram earnings success (Figure 3.10). Thirty-one percent of terminees with full-time jobs were successful in terms of earnings in year one, and 74 percent of them were also successful in the second year. The situation was much less sanguine for those without full-time jobs. Only 9 percent of this group had high first-year postprogram earnings, though, if successful this year, they were also likely to succeed in year two (71 percent). More than 81 percent of second-year earnings successes held full-time jobs at termination from the program.

Figure 3.9
155 Percent of Poverty
Employment at Termination

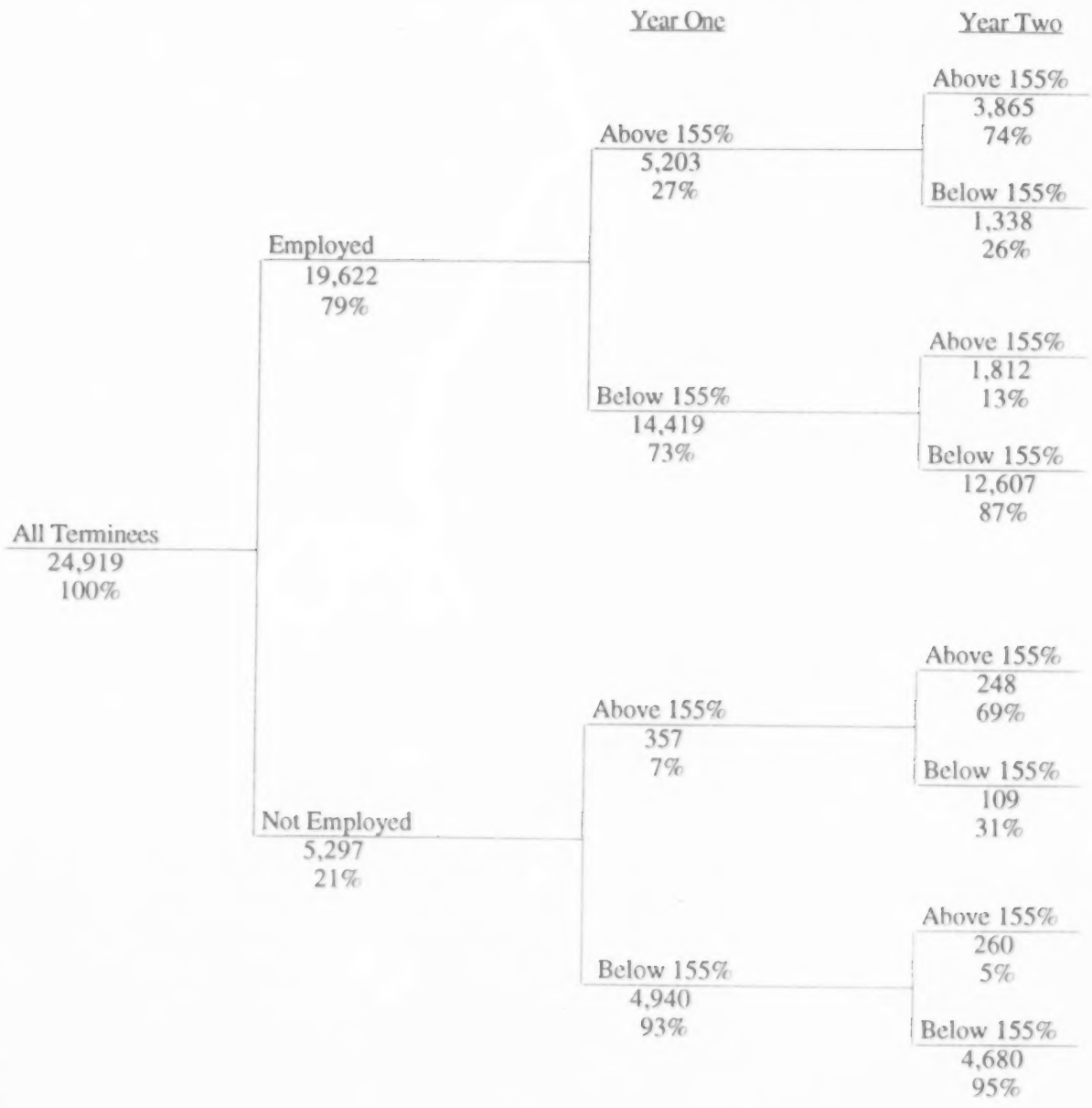
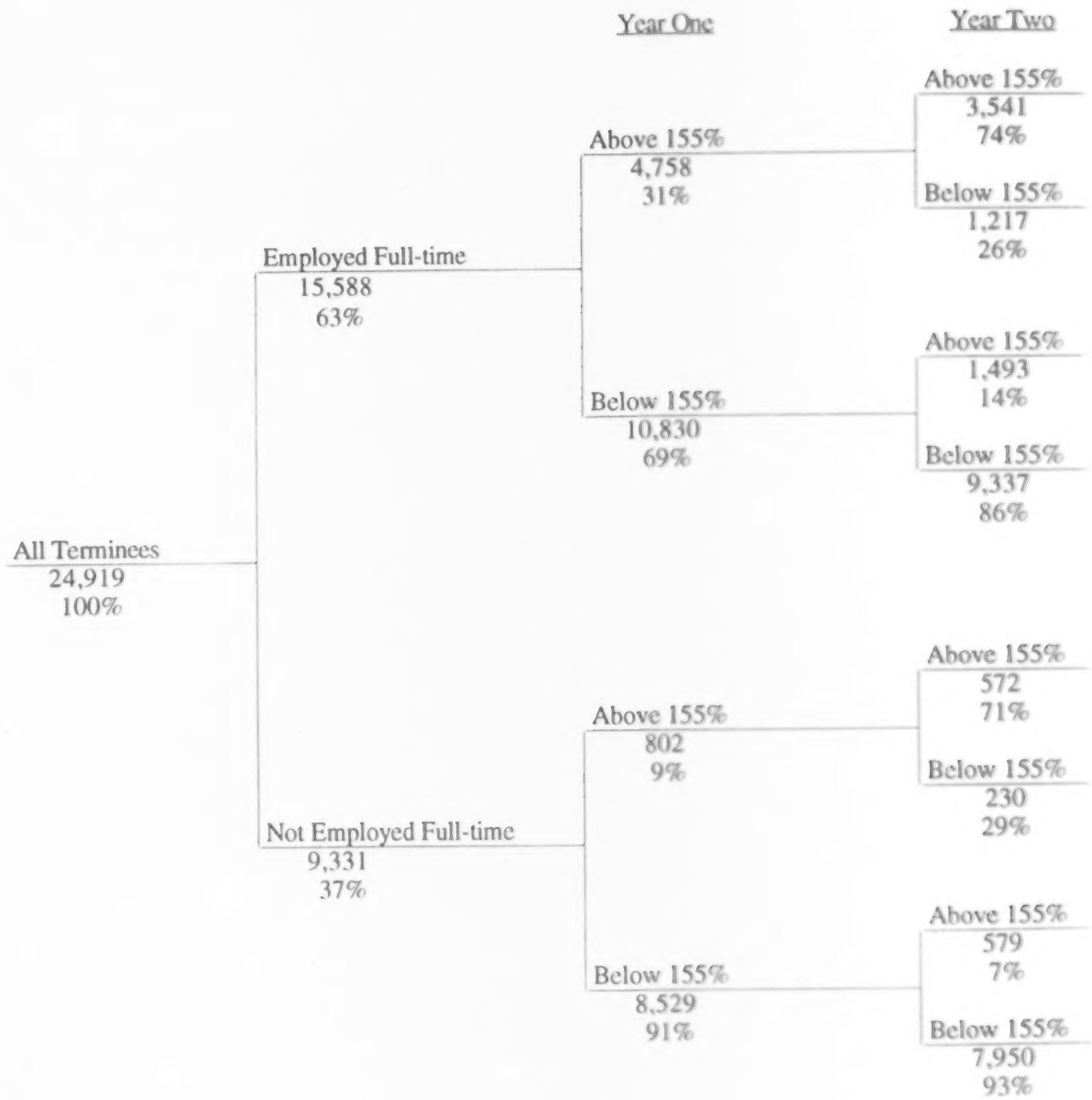


Figure 3.10
155 Percent of Poverty
Full-Time Employment at Termination



C. Explaining Success—Multivariate Analysis

Descriptive analysis can only take the discussion so far. In order to isolate specific influences affecting outcomes, multivariate analysis was performed, modeling successful outcomes as a function of demographic, participation and local population and economic variables. Two kinds of analysis were performed, ordinary least squares (OLS) regression and logistic regression, using the same data and structural equations. Preliminary analysis indicated that the direction of influence and significance levels did not differ much between the two statistical procedures. Only the final OLS regression results are presented here.

The dependent variables for the regressions were dummy variables for the two success measures: strict steady employment; and earnings greater than 155 percent of poverty. If the outcome was a success by a particular measure, then the dummy variable for that measure took the value one. If the outcome was not a success, the dummy variable took the value zero. Positive coefficients in the regressions indicate independent variables related to successful outcomes. Separate regressions were run for each of the two postprogram years, using the success measures for that year. A table defining the independent variables used in these regressions is contained in Appendix B.

Employment Success

Table 3.6 summarizes the results for strict-steady employment success for all PY1990 Texas out-of-school youth and adult JTPA terminees, for both the first and second postprogram years. Variables which feature a "+" ("-") were found to have exerted a statistically significant,[1] positive (negative) effect on the rate of employment success when controlling for the effects of other factors. Variables indicated with a blank (" ") space had no statistically significant effects on the rate of employment success.

There are few differences between the two years in the way demographic characteristics, program participation and environmental factors affect postprogram employment success for terminees as a whole. Being an out-of-school youth is associated with significant reductions in the chances of employment success in both years relative to all adult groups. Blacks also face significantly lower chances of employment success, while Hispanics face higher ones relative to Whites in both years. These findings mirror their experiences in the labor market generally. High school dropouts were significantly less likely and post-high school graduates significantly more likely to succeed in both years than those with just a high school diploma.

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[1] Statistical significance was measured at the 10 percent, 5 percent or 1 percent levels.

Table 3.6
What Factors Explain the Employment Success of PY1990 Texas Out-of School Youth and Adult JTPA Terminees in the First and Second Postprogram Year?

Characteristic/Variable	Postprogram Year	
	First	Second
Age 18-21 years	-***	-*
Age 30-39 years		
Age 40-49 years		
Age 50+ years		
Black	-***	-*
Hispanic	+***	+***
High School Dropout	-***	-***
Post-High School	+***	+***
Single Parent	+***	+***
Parent in 2-Parent Family	+***	+***
Other Family Member		
2-Person Family		
3-Person Family		
4-Person Family		
5-Person Family		
AFDC Recipient	-***	-***
Other Public Assistance Recipient	-***	-***
Basic Skills Training		
Occupational Skills Training	+***	+***
OJT	+***	+*
Job Search Assistance		
Average Prior Earnings, Years 1-2	+***	+***
Minimal Employment at Term.		
Substantial Employment at Term.	+***	+***
Fulltime Employment at Term.	+***	+***
Percent Families in Poverty		
Median Area Rent		
Average Area Unemployment, 1991-92		
Average Weekly Wages, 1991-92		
Low Area Employment Growth		
High Area Employment Growth	+*	+***
R-square	0.1317	0.1015
n	23,091	23,091

Source: Appendix Table B.2.

Parents—whether single parents or parents in 2-parent families—were significantly more likely to succeed than others, while family size was not associated with employment success either positively or negatively. Terminees who were receiving public aid at enrollment in any form were significantly less likely to enjoy employment success. (Appendix C provides a closer look at the relationship between family status and size and earnings success.)

Only the OST and OJT activities have highly significant positive effects on employment success in the first postprogram year. The coefficient for OJT is marginally significant but still positive in the year two.

As suggested in the literature, the prior earnings coefficient was highly significant and positive, indicating that one of the primary indicators of postprogram employment success was *preprogram* success. In addition, the results for termination employment status variables show little or no effect on employment success from being marginally employed at termination, but very significant positive effects from having either substantial part-time or full-time work at termination. These effects are strong and consistent across both postprogram years.

Somewhat surprisingly, only one of the local economic and population variables produced significant effects on terminees' postprogram success. As expected, high area employment growth rates were significantly and positively associated with employment success for these terminees.

The factors affecting employment success for males and females were similar for the most part (see Table 3.7). As with the earnings success models discussed subsequently, the factors having the most significant independent effects on postprogram employment success regardless of gender were prior earnings, full-time employment status at termination and having less than a high school education; the former variables were positively associated with success, while the last had a negative influence.

There were also interesting differences. First, although age generally was estimated to have little influence on employment success, young (18-21 year old) females and some older (30-39 year old) males had significantly lower success rates. Second, Black males experienced significantly lower employment success rates, while Black females experienced significantly higher ones. Third, having some post-high school education appears to have helped females' postprogram employment success significantly but not that for males. Fourth, only males who were parents in 2-parent families were more likely to succeed in terms of postprogram employment. Fifth, for females, receiving any form of public assistance lowered their chances for employment success,

Table 3.7
Do Different Factors Explain the Employment Success of Male and Female PY 1990 Texas Out-of-School Youth and Adult JTPA Terminees in the Second Postprogram Year?

Characteristic/Variable	Gender	
	Male	Female
Age 18-21 years		-***
Age 30-39 years	-***	
Age 40-49 years		
Age 50+ years	-*	
Black	-***	+*
Hispanic	+***	+***
High School Dropout	-***	-***
Post-High School		+***
Single Parent		
Parent in 2-Parent Family	+***	
Other Family Member		
2-Person Family		
3-Person Family		
4-Person Family		
5-Person Family		
AFDC Recipient		-***
Other Public Assistance Recipient	-***	-***
Basic Skills Training	+**	
Occupational Skills Training	+**	
OJT	+***	
Job Search Assistance	+***	
Average Prior Earnings, Years 1-2	+***	+***
Minimal Employment at Term.		
Substantial Employment at Term.	+***	+**
Fulltime Employment at Term.	+***	+***
Percent Families in Poverty		
Median Area Rent	-*	
Average Area Unemployment, 1991-92		
Average Weekly Wages, 1991-92		
Low Area Employment Growth		
High Area Employment Growth		
R-square	0.0942	0.1141
n	9,413	13,677

Source: Appendix Table B.3 – Table B.4.

while for males, only other public assistance did.[2] Sixth, males apparently benefited from participating in all activities (relative to participation in the Other category), while there were no significant year-two coefficients for females. And, finally, male, but not female, terminees' employment success appears to have been significantly though not strongly affected (negatively) by median area rents.

Earnings Success

Earnings success results for PY1990 Texas JTPA terminees as a whole for both postprogram years are summarized in Table 3.8. As above, variables with a "+" ("-") exerted a statistically significant, positive (negative) effect on the rate of success, while those with a blank (" ") had no such effects. Most of the variable coefficients had the expected signs and either produced consistent effects across postprogram years or had effects which were significant in one but not the other year. Being an out-of-school youth, Black, a school dropout, a recipient of other public assistance and living in areas with high shares of families in poverty all were associated with significantly lower earnings success rates in both postprogram years. Consistent positive earnings success effects for both years were found for post-high school education, parents and other family members, those terminating from OST and OJT and with full-time jobs, and terminees living in areas with high average weekly wages. (Again, Appendix C offers additional insights into the relationship between family status, family size and earnings success.)

Some interesting results, particularly in comparison with the employment success, involved Hispanics, other family members, Job Search Assistance participants and employment at less than full-time status. Being Hispanic was not significantly associated with earnings success either postprogram year, in sharp contrast with the employment success model which featured highly significant positive effects. Hispanics tend to place very high value on work and exhibit workforce participation patterns which certainly bear this out. Yet, Hispanics' earnings levels tend to be well below those of Whites.

Other family members were also significantly more likely to experience earnings success in both years, whereas their employment success rates were unaffected.

JSA participation was associated with significant *negative* effects on earnings success in the first postprogram year, but no effect in year two. The JSA coefficient was positive but not significant for employment success in both years.

It is curious that any positive effect which substantial part-time employment at termination may have had on employment success is lost in the earnings success model. While terminees with full-time termination jobs experienced a strong boost in both years

[2]Few males (4 percent) in JTPA were AFDC caretakers in Texas.

Table 3.8
What Factors Explain the Earnings Success of PY1990 Texas Out-of-School Youth and Adult JTPA Terminees in the First and Second Postprogram Year?

Characteristic/Variable	Postprogram Year	
	First	Second
Age 18-21 years	-***	-***
Age 30-39 years		
Age 40-49 years		
Age 50+ years		-***
Black	-***	-***
Hispanic		
High School Dropout	-***	-***
Post-High School	+***	+***
Single Parent	+***	+***
Parent in 2-Parent Family	+***	+***
Other Family Member	+***	+*
2-Person Family		
3-Person Family		
4-Person Family		
5-Person Family		
AFDC Recipient		-***
Other Public Assistance Recipient	-***	-***
Basic Skills Training		
Occupational Skills Training	+***	+***
OJT	+***	+***
Job Search Assistance	-*	
Average Prior Earnings, Years 1-2	+***	+***
Minimal Employment at Term.		
Substantial Employment at Term.	-***	
Fulltime Employment at Term.	+***	+***
Percent Families in Poverty	-***	-**
Median Area Rent	-***	
Average Area Unemployment, 1991-92	-**	
Average Weekly Wages, 1991-92	+***	+***
Low Area Employment Growth		-*
High Area Employment Growth		
R-square	0.1624	0.1443
n	23,091	23,091

Source: Appendix Table B.5.

as noted above, those exiting with substantial part-time employment apparently suffered significant negative effects on their rates of earnings success in the first postprogram year; these negative effects did not carry into the second postprogram year.

Local population and economic variables also seemed to have had more noticeable effects on earnings success. Higher area weekly wages, as expected, were significantly associated with greater earnings success in both years, while the shares of families living in poverty were significantly and negatively related to earnings success. Median area rent and unemployment were associated with negative effects in the first year but not the second; low area employment growth was marginally associated with negative effects in year two.

Similar factors affected male and female earnings success in the second postprogram year (Table 3.9), and these factors largely mirror those found for employment success. Variables with highly significant independent negative effects on postprogram earnings success, regardless of gender, were being Black, having less than a high school education, and receiving other public assistance; similarly, variables with highly significant positive effects on second-year earnings for both males and females were having some post-high school education, participating in OST, prior earnings, having full-time work at termination and living in high-wage areas.

There were interesting differences by gender as well. First, the pattern of effects by age parallels that for employment success, but in the earnings model being a member of the youngest female group and the oldest male group has significant negative effects on earnings success in the second year post. Second, while being Hispanic was strongly associated with positive employment effects, it is unrelated to earnings success. This reflects forces in the labor market as a whole in Texas, with Hispanics exhibiting very strong work effort, but drawing lower wages. Note that being Black, however, has a strong negative influence on earnings success for both men and women. Third, a curious difference is that being a parent and, to a lesser extent, another family member has significant positive effects on earnings success for males, while none of the family status variables are significant for females. Recall that only about one in three males has (or admitted having) parental responsibilities, while most females are parents. Fourth, while all program activities are associated with male earnings success (relative to participation in Other), just as for employment success, OST is the sole activity associated with (highly) with positive success effects for females. Fifth, while securing a full-time termination job retains its power for explaining positive earnings success regardless of gender, for females, minimal part-time employment has a significant negative effect on earnings success.

Table 3.9
Do Different Factors Explain the Earnings Success of Male and Female PY 1990 Texas Out-of-School Youth and Adult JTPA Terminees in the Second Postprogram Year?

Characteristic/Variable	Gender	
	Male	Female
Age 18-21 years		-***
Age 30-39 years		
Age 40-49 years		
Age 50+ years	-***	
Black	-***	-***
Hispanic		
High School Dropout	-***	-***
Post-High School	+***	+***
Single Parent	+***	
Parent in 2-Parent Family	+***	
Other Family Member	+*	
2-Person Family		
3-Person Family		
4-Person Family		
5-Person Family		
AFDC Recipient		-***
Other Public Assistance Recipient	-***	-***
Basic Skills Training	+*	
Occupational Skills Training	+***	+***
OJT	+***	
Job Search Assistance	+**	
Average Prior Earnings, Years 1-2	+***	+***
Minimal Employment at Term.		-**
Substantial Employment at Term.		
Fulltime Employment at Term.	+***	+***
Percent Families in Poverty		
Median Area Rent	-**	
Average Area Unemployment, 1991-92		
Average Weekly Wages, 1991-92	+***	+***
Low Area Employment Growth		-*
High Area Employment Growth		
R-square	0.137	0.1414
n	9,413	13,677

Source: Appendix Table B.6 – Table B.7.

Employment and Earnings Success: Summary

Using the criteria established for this analysis, PY 1990 Texas JTPA terminees had higher continuous (strict-steady) employment than earnings (155 percent of poverty) success rates, and there was less year-to-year variation in employment than earnings success rates as well. Most of the variables estimated to have significant, independent effects on employment and earnings success had the expected effects.

Several key findings are noted. First, prior earnings has highly significant, positive effects on both employment and earnings success after controlling for the effects of demographic, participation and local economic factors. Since only gross outcomes are measured here, this suggests that a portion of Texas' PY1990 JTPA postprogram successes may also have been its preprogram successes as well. All of the other findings should be interpreted with this in mind. Second, of the major program activity variables, participation in training, especially occupational skills training (or OST), had the most consistently positive effects on terminees' postprogram success, both for employment and earnings. Third, termination employment status also has consistently positive effects on both employment and earnings success. The effects of having a full-time job were particularly strong. For earnings success, having less-than-full-time employment actually was found to be less productive than being unemployed. The debate over the value of the placement job has been lengthy and heated (e.g., Gay and Borus 1980). As Romero (1994) and others have recently pointed out, this suggests that there is considerable value in job placement status at termination which should not be ignored. Finally, having parental (and other family) responsibilities appears to produce beneficial effects on employment and earnings success as well, especially for males. Having parental responsibilities did not appear to produce the same positive effects for females, but this may stem from the fact that most females, but relatively few males, were parents.

D. Views from the Field

This section describes the process for selecting successful SDAs for field interviews and reports on those visits. It offers concluding observations drawn from the field interviews as well as from discussions with knowledgeable state JTPA officials.

Selecting Successful SDAs

Four "successful" SDAs were selected for field visits to help the researchers better understand and validate the statistical findings and to assist in developing policy implications and recommendations. The procedure used to identify the group from which these SDAs were selected was analogous to the USDOL/ETA performance standards model, but substituting the study's two employment and earnings success measures for the usual JTPA performance standards. Earnings and employment success were modeled using the multivariate regression models described above to determine the predicted rate of success which was then compared to the actual rate for that measure. SDAs were subsequently ranked by the actual-predicted success residuals.

SDAs which ranked near the top on the strict-steady employment and 155 percent of poverty earnings measures were considered viable candidates for field visits. Four SDAs were ultimately selected and visited by Center staff in May 1995 (see Figure 3.6): Central Texas (Belton), West Central Texas (Abilene), Concho Valley (San Angelo), and Golden Crescent (Victoria). These are all relatively small-to-mid-sized JTPA programs encompassing large geographical areas with low population densities and generally low wages. (Descriptive statistics for these SDAs are provided in Appendix B.)

Interview Insights

Local JTPA administrators and their staffs generally concurred with the research findings concerning their success on both the employment and earnings measures. Almost without exception, the five main factors these SDAs identified as contributing most to their success were the same or remarkably similar. That these factors are highly interrelated is evident even from this brief discussion.

First, they cited proactive use of a demand/emerging occupations and targeted industries process for determining which jobs to train for. This process was developed and pioneered by JTPA State staff in the mid-1980s, then refined and made accessible to local JTPA and related workforce development programs—especially vocational education—throughout Texas (Mckee and Harrell 1989). Local JTPA staffs mentioned both their fervent use of demand/emerging occupations and their participation in regional

quality workforce planning processes.[3] Central Texas SDA went the process a step further. They even conducted their own longer-term participant follow-up studies and estimated the amount of earnings necessary for families to exit poverty and the types of jobs required to produce such earnings in the pre1990-91 period. From this effort, they were able to redirect the PIC's existing program thrust and provide a considerable boost to their long-term outcome results.

Second, they also pointed to their longstanding emphasis on Occupational Skills Training over the use possible program activities as a key factor in their success. Long before other SDAs in the State and nationally had begun to move away from JSA as a stand-alone activity, these had begun to stress OST as their principal activity. Thus, having selected a set of targeted industries and demand/emerging occupations, they held out training interventions to their participants as the primary vehicle.

Third, these SDA staff also indicated that "hard-nosed" participant assessment and counseling at program entry contributed much to their success. Applicants seeking to pursue careers in such standard and unfortunately low-success fields as cosmetology were consistently given a variation of an important message. If they still wished to enroll in such programs after being confronted with data showing their poor performance record, they were certainly welcome to—just not at JTPA's expense. Once having tried and (typically) failed in such training, they would be welcomed back as a JTPA participant, this time to enroll in training suited to more fruitful pursuits. SDAs also tended to integrate demand occupations and targeted industries data into their up-front assessment and counseling for participants. Again, Texas, in large part via its SOICC, has been in the forefront in terms of developing counseling and program planning tools to put LMI at the fingertips of the appropriate staff. SOCRATES, the Standardized Occupational Components for Regional Analysis of Trends in Employment System, stands out in this regard.[4]

Fourth, most of these SDAs aggressively applied substantive performance management techniques to their program operations, techniques reaching well beyond year-end performance reviews tied to performance against state-adjusted USDOL standards. In fact, few of the SDA staff even mentioned JTPA performance standards as having an influence on their success. A prime example is that one of the SDAs for years had made extensive use of a request-for-bids (or qualifications) process on a biennial basis, wiping the slate clean in terms of presumptive training service providers. Note

[3]A description and assessments of Texas' Quality Work Force Planning initiative and its results are provided in Andrade et al. (1992) and Texas Education Agency (1992).

[4]More recently, SOICC has joined the one-stop career center development initiative in Texas and is pushing to develop more client-empowering LMI tools as well.

that, as explained further below, none of the SDAs interviewed relied on a standing-subcontractor operating model. Instead, trainers making the list of qualified providers in their area were deemed worthy of receiving individual participant referrals in the field(s) they trained for. Several of the SDAs wondered just how their counterpart SDAs could possibly hope to exert timely management control over a system of standing subcontractors, especially when these contractors often served as the primary or exclusive youth provider or the sole provider for a specified geographic area.[5]

Fifth, SDAs also cited the relative absence of political pressure in the selection of potential training providers. Most had long since convinced their local elected officials (LEOs) that there was little to be gained from exerting day-to-day influence surrounding provider selection; in fact, SDA staff described going to great lengths to apprise their LEOs of the nature of their training programs, the participants served and the effects of their services, in part to maintain a healthy distance. Not surprisingly, one SDA characterized their most heated and vocal PIC meeting of the year as the one during which the list of demand/emerging occupations was finalized, in large part because that list also all but determined their area training providers. Several of these SDAs also stressed the importance of keeping service providers from serving on their PICs.

Finally, these SDAs tended to place great value in their staff and in their staff's capacity for decision making with their clients. Several operated by means of a vocational rehabilitation, case manager model, under which case managers were empowered to make career decisions in conjunction with participants, within parameters established by law and regulations and their *own individual training budget.*

Several other factors appear to play an important role in explaining their success. First, all of the Texas SDAs identified were *small to mid-sized* (in terms of the numbers of terminees), and as such, their local program operations may have been more tractable than some of the larger ones. Having to manage programs spread out over such vast geographical areas also would tend to work in the opposite direction. Second, these SDAs—all of which were hosted organizationally by regionally-based Councils of Government—operated their local JTPA programs via an *individual referral model.* Under this model, SDA staff performed intake, eligibility and assessment functions, after which participants were referred to "certified" providers, often community and technical

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[5]Similar sentiments have been expressed in a May 17, 1995 *Employment and Training Reporter* article. Texas' latest legislative foray into the workforce development arena—House Bill 1863, signed by Governor Bush and slated to become effective September 1, 1995—pushes this concept even further, mandating that local workforce boards oversee independent intake and assessment centers and that such centers be precluded from providing training. Training services are to be secured, based on the independent assessments, by individual referrals to providers in their community which operate without the benefit of standing subcontracts.

colleges. In the event that demand appeared to dry up in a given occupational area, referrals to training courses in that area were curtailed or ceased altogether; if a provider's trainees failed to perform at the desired level or could not secure employment, referrals to that particular provider would stop. Third, nearly all of these SDAs had enjoyed ***high levels of staff continuity*** over the years; in one, not a single new professional had been hired since the mid 1980s, while the two senior staff had been doing essentially the same jobs since the mid-1970s.

These SDAs indicated that their biggest obstacle to success was labor market conditions. In their local labor markets are far too many jobs offering low pay and few employee benefits, and far too few with good pay and benefits.

In summary, these SDAs offer a useful look at model model employment and training approaches. They have hired, trained and retained committed professional staffs, practicing what they are ostensibly teaching. They also embody some of the most recent program emphases, which include stressing up-front assessment, training for demand occupations (and industries), as well as focusing heavily on skills training. Moreover, they have relied on an individual-referral model for service delivery, practiced substantive performance management and scrupulously avoided political pressures. There is much to be learned from the approaches these SDAs have used in delivering training.

Appendix B

Texas Data

Table B.1
Definitions of Variables in Regressions

INTERCEP	The constant term
PRESUM	Sum of UI wages for two years before JTPA
FEMALE	Dummy variable for female gender
BLACK	Dummy variable for black race
HISPANIC	Dummy variable for Hispanic ethnicity
OTHER	Dummy variable for non-Anglo, non-Hispanic and non black individuals
DROPOUT	Dummy variable for last grade completed less than 12
POSTHS	Dummy variable for high school completed and attendance at academic, technical or vocational school
AGE18_21	Dummy variable for individuals aged 18 to 21
AGE30_39	Dummy variable for individuals aged 30 to 39
AGE40_49	Dummy variable for individuals aged 40 to 49
AGE50_UP	Dummy variable for individuals aged 50 and over
SINGPNT	Individual was a single parent
DUALPNT	Individual was a parent in a two-parent family
OTHRFAM	Individual was a non-parent family member
FSIZE2	Dummy variable for individuals in families of two individuals
FSIZE3	Dummy variable for individuals in families of three individuals
FSIZE4	Dummy variable for individuals in families of four individuals
FSIZE5	Dummy variable for individuals in families of five or more individuals
INAFDC	Dummy variable for individuals receiving AFDC while in JTPA
OTHASST	Dummy variable for individuals receiving any other public assistance while in JTPA
MOST	Dummy variable for individuals for whom occupational skills training was the major activity
MBST	Dummy variable for individuals for whom basic skills training was the major activity
MOJT	Dummy variable for individuals for whom on the job training was the major activity
MOTH	Dummy variable for individuals whose major activity was "other"
MINPTE	Individual was employed in minimal part time job at termination
SUBPTE	Individual was employed in substantial part time job at termination
FULLTE	Individual was employed in full time job at termination
FAMINPOV	Percent of families in poverty in county
MEDRENT	Median rent in county
UN91_92	County unemployment rate averaged for 1991 and 1992
WWTERM	Average weekly wages averaged for 1991 and 1992
LOWGROW	Growth rate of employment was 1 percent per year or less in county over the period 1990 to 1993
HIGROW	Growth rate of employment was 3 percent per year or higher in county over the period 1990 to 1993
URBAN	County had a population density of 495 persons per square mile or higher in 1990
RURAL	County had a population density of 100 persons per square mile or less in 1990

Table B.2
Strict Steady Employment
All Terminees

R-Square	0.1317	0.1015
Number of Observations	23,091	23,091
Dependent Mean	0.33605	0.33496

Variable	First Post-Program Year Coefficient (t-Statistic)	Second Post-Program Year Coefficient (t-Statistic)
INTERCEP	0.139065 2.952***	0.15687 3.277***
AGE18_21	-0.02578 -3.239***	-0.014865 -1.837*
AGE30_39	-0.002261 -0.288	-0.007112 -0.892
AGE40_49	-0.007183 -0.673	0.00188 0.173
AGE50_UP	0.006561 0.385	-0.010025 -0.579
BLACK	-0.031618 -3.789***	-0.016344 -1.927*
HISPANIC	0.044822 5.548***	0.044318 5.397***
DROPOUT	-0.07462 -9.518***	-0.085681 -10.752***
POSTHS	0.027516 3.555***	0.022484 2.858***
SINGPNT	0.04961 2.561***	0.058644 2.979***
DUALPNT	0.06267 3.285***	0.065685 3.388***
OTHRFAM	0.028214 1.539	0.030475 1.636
FSIZE2	0.01131 0.605	0.00504 0.265
FSIZE3	0.007861 0.413	0.011115 0.574
FSIZE4	0.001081 0.056	0.00769 0.389
FSIZE5	0.015509 0.812	0.020336 1.048
INAFDC	-0.032046 -3.454***	-0.040955 -4.343***
OTHASST	-0.04669 -6.866***	-0.039224 -5.674***
MBST	0.019321 1.313	0.008078 0.54
MOST	0.048417 3.465***	0.036923 2.6***
MOJT	0.084173 6.017***	0.026558 1.868*
MJSA	0.021423 1.184	0.015696 0.853
PRESUM	9.518E-06 26.663***	1.0124E-05 27.901***
MINPTE	0.006833 0.271	0.021519 0.841
SUBPTE	0.106308 9.662***	0.073959 6.613***
FULLTE	0.202273 20.948***	0.138163 14.077***
FAMINPOV	-0.05373 -0.49	-0.001214 -0.011
MEDRENT	-0.000188 -1.637	-0.000141 -1.212
UN91_92	-0.067858 -0.395	0.084935 0.486
WWTERM	5.3577E-05 0.921	7.6022E-05 1.286
LOWGROW	0.001376 0.179	-0.006031 -0.771
HIGROW	0.016385 1.946*	0.020862 2.437***
FEMALE	0.025569 3.576***	0.010485 1.442

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Table B.3
Strict Steady Employment
Male Terminees

R-Square	0.1180	0.0942
Number of Observations	9,413	9,413
Dependent Mean	0.35851	0.35649

Variable	First Post-Program Year Coefficient (t-Statistic)	Second Post-Program Year Coefficient (t-Statistic)
INTERCEP	0.149428 1.93*	0.217084 2.77***
AGE18_21	0.006874 0.523	0.010718 0.806
AGE30_39	-0.00557 -0.434	-0.032975 -2.539***
AGE40_49	-0.000688 -0.041	0.00228 0.133
AGE50_UP	-0.014388 -0.541	-0.047518 -1.766*
BLACK	-0.067447 -5.006***	-0.070708 -5.185***
HISPANIC	0.030979 2.431***	0.030902 2.396***
DROPOUT	-0.075085 -6.105***	-0.084353 -6.776***
POSTHS	0.02477 1.981**	0.012273 0.97
SINGPNT	0.032797 0.923	0.048347 1.345
DUALPNT	0.081858 3.125***	0.103837 3.917***
OTHRFAM	0.002212 0.092	0.038884 1.6
FSIZE2	0.029382 1.148	0.003866 0.149
FSIZE3	0.005023 0.191	0.00294 0.111
FSIZE4	0.028567 1.049	0.006909 0.251
FSIZE5	0.021937 0.842	0.005307 0.201
INAFDC	-0.038257 -1.58	-0.031572 -1.289
OTHASST	-0.048068 -4.455***	-0.027285 -2.499***
MBST	0.021737 0.898	0.050818 2.075**
MOST	0.037317 1.642	0.047466 2.064**
MOJT	0.100193 4.581***	0.059637 2.694***
MJSA	0.05681 1.923*	0.077433 2.59***
PRESUM	9.225E-06 18.549***	0.00000918 18.237***
MINPTE	0.019781 0.367	-0.022179 -0.407
SUBPTE	0.086179 4.433***	0.062522 3.177***
FULLTE	0.144834 8.701***	0.116204 6.897***
FAMINPOV	0.03628 0.2	-0.135295 -0.737
MEDRENT	-0.000353 -1.889*	-0.000364 -1.924*
UN91_92	-0.109937 -0.389	0.29268 1.023
WWTERM	0.000227 2.418***	0.000136 1.435
LOWGROW	0.012698 0.993	0.003227 0.249
HIGROW	0.022354 1.659*	0.019825 1.453

Table B.4
Strict Steady Employment
Female Terminees

R-Square	0.1459	0.1141
Number of Observations	13,677	13,677
Dependent Mean	0.32059	0.32015

Variable	First Post-Program Year Coefficient (t-Statistic)	Second Post-Program Year Coefficient (t-Statistic)
INTERCEP	0.184174 3.09***	0.15896 2.62***
AGE18_21	-0.050726 -5.04***	-0.036803 -3.592***
AGE30_39	0.002457 0.247	0.012812 1.268
AGE40_49	-0.012126 -0.876	-0.000584 -0.041
AGE50_UP	0.017962 0.802	0.00637 0.279
BLACK	-0.006736 -0.63	0.020416 1.876*
HISPANIC	0.054395 5.199***	0.055277 5.19***
DROPOUT	-0.073982 -7.249***	-0.087871 -8.457***
POSTHS	0.02655 2.696***	0.028009 2.794***
SINGPNT	0.057655 1.993**	0.03471 1.179
DUALPNT	0.062466 2.115**	0.034084 1.133
OTHRFAM	0.059184 2.041**	0.010512 0.356
FSIZE2	-0.010299 -0.353	0.001422 0.048
FSIZE3	-0.014134 -0.477	0.00079 0.026
FSIZE4	-0.033881 -1.131	-0.004441 -0.146
FSIZE5	-0.010374 -0.349	0.014683 0.485
INAFDC	-0.030497 -2.996***	-0.038006 -3.667***
OTHASST	-0.044449 -5.048***	-0.045607 -5.088***
MBST	0.018916 1.019	-0.017726 -0.938
MOST	0.055066 3.107***	0.027169 1.506
MOJT	0.078277 4.267***	0.00856 0.458
MJSA	0.000624 0.027	-0.024982 -1.074
PRESUM	9.577E-06 17.939***	1.0939E-05 20.125***
MINPTE	0.001372 0.049	0.020275 0.704
SUBPTE	0.111546 8.36***	0.068072 5.011***
FULLTE	0.228429 19.188***	0.139681 11.524***
FAMINPOV	-0.111397 -0.811	0.105306 0.753
MEDRENT	-0.00009789 -0.674	1.4878E-05 0.101
UN91_92	-0.042667 -0.197	-0.092358 -0.419
WWTERM	-0.00005709 -0.771	3.5877E-05 0.476
LOWGROW	-0.006809 -0.706	-0.012742 -1.298
HIGROW	0.005857 0.54	0.016798 1.522

Table B.5
155 Percent of Poverty
All Terminees

R-Square	0.1624	0.1443
Number of Observations	23,091	23,091
Dependent Mean	0.20925	0.23389

Variable	First Post-Program Year Coefficient (t-Statistic)	Second Post-Program Year Coefficient (t-Statistic)
INTERCEP	0.16055 4.03***	0.117203 2.797***
AGE18_21	-0.02744 -4.076***	-0.01935 -2.732***
AGE30_39	0.007864 1.185	-0.001899 -0.272
AGE40_49	0.005889 0.652	-0.003638 -0.383
AGE50_UP	-0.016937 -1.175	-0.03533 -2.331***
BLACK	-0.071394 -10.115***	-0.05265 -7.092***
HISPANIC	-0.005623 -0.823	0.005353 0.745
DROPOUT	-0.054614 -8.236***	-0.069687 -9.992***
POSTHS	0.061752 9.432***	0.046946 6.817***
SINGPNT	0.074441 4.544***	0.064445 3.74***
DUALPNT	0.094495 5.857***	0.086566 5.101***
OTHRFAM	0.046481 2.998***	0.030018 1.841*
FSIZE2	-0.021211 -1.341	-0.003821 -0.23
FSIZE3	-0.021546 -1.337	-0.004169 -0.246
FSIZE4	-0.026051 -1.584	-0.000113 -0.007
FSIZE5	-0.013454 -0.833	0.001184 0.07
INAFDC	-0.008766 -1.117	-0.035228 -4.268***
OTHASST	-0.048403 -8.415***	-0.04831 -7.985***
MBST	-0.002102 -0.169	0.00732 0.559
MOST	0.055106 4.663***	0.062667 5.041***
MOJT	0.048237 4.077***	0.035937 2.888***
MJSA	-0.029517 -1.928*	0.00732 0.455
PRESUM	9.436E-06 31.254***	1.0525E-05 33.14***
MINPTE	-0.029633 -1.392	-0.026593 -1.188
SUBPTE	-0.024012 -2.58***	-0.007046 -0.72
FULLTE	0.101653 12.447***	0.09436 10.985***
FAMINPOV	-0.274913 -2.965***	-0.21277 -2.182**
MEDRENT	-0.000348 -3.592***	-0.000124 -1.217
UN91_92	-0.290624 -2**	-0.025596 -0.167
WWTERM	0.000364 7.409***	0.000226 4.368***
LOWGROW	-0.007258 -1.115	-0.012415 -1.814*
HIGROW	0.00014 0.02	0.000392 0.052
FEMALE	-0.050066 -8.278***	-0.036491 -5.736***

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Table B.6
155 Percent of Poverty
Male Terminees

R-Square	0.1658	0.1370
Number of Observations	9,413	9,413
Dependent Mean	0.26620	0.28415

Variable	First Post-Program Year Coefficient (t-Statistic)	Second Post-Program Year Coefficient (t-Statistic)
INTERCEP	0.33908 4.886***	0.163645 2.272**
AGE18_21	-0.013481 -1.145	-0.000203 -0.017
AGE30_39	0.025218 2.192**	-0.006289 -0.527
AGE40_49	0.028438 1.87*	0.010338 0.655
AGE50_UP	-0.025366 -1.065	-0.073576 -2.976***
BLACK	-0.100419 -8.316***	-0.085117 -6.792***
HISPANIC	0.008896 0.779	-0.000186 -0.016
DROPOUT	-0.055839 -5.065***	-0.071754 -6.271***
POSTHS	0.048789 4.354***	0.034127 2.934***
SINGPNT	0.098289 3.087***	0.079967 2.42***
DUALPNT	0.139159 5.928***	0.137299 5.635***
OTHRFAM	0.051572 2.396***	0.040754 1.824*
FSIZE2	-0.028018 -1.222	-0.006585 -0.277
FSIZE3	-0.03273 -1.389	-0.032183 -1.316
FSIZE4	-0.025179 -1.032	-0.002647 -0.104
FSIZE5	-0.031667 -1.357	-0.020463 -0.845
INAFDC	-0.012551 -0.579	-0.030954 -1.375
OTHASST	-0.065771 -6.801***	-0.050468 -5.028***
MBST	0.002928 0.135	0.041454 1.841*
MOST	0.0632 3.103***	0.077514 3.667***
MOJT	0.081579 4.162***	0.07659 3.765***
MJSA	0.022259 0.841	0.060958 2.219**
PRESUM	9.246E-06 20.742***	1.0121E-05 21.877***
MINPTE	-0.031916 -0.662	0.024947 0.498
SUBPTE	-0.04418 -2.535***	-0.015811 -0.874
FULLTE	0.0836 5.604***	0.083929 5.42***
FAMINPOV	-0.561376 -3.453***	-0.265353 -1.573
MEDRENT	-0.000932 -5.568***	-0.000378 -2.177**
UN91_92	-0.387031 -1.527	-0.17152 -0.652
WWTERM	0.000548 6.514***	0.00034 3.889***
LOWGROW	-0.007381 -0.644	-0.010109 -0.85
HIGROW	0.004568 0.378	-0.003139 -0.25

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Table B.7
155 Percent of Poverty
Female Terminees

R-Square	0.1469	0.1414
Number of Observations	13,677	13,677
Dependent Mean	0.17005	0.19930

Variable	First Post-Program Year Coefficient (t-Statistic)	Second Post-Program Year Coefficient (t-Statistic)
INTERCEP	0.013839 0.289	0.068351 1.336
AGE18_21	-0.03901 -4.818***	-0.034716 -4.019***
AGE30_39	-0.00066 -0.083	0.002322 0.273
AGE40_49	-0.009975 -0.896	-0.016499 -1.389
AGE50_UP	-0.01763 -0.978	-0.016086 -0.837
BLACK	-0.052373 -6.089***	-0.029462 -3.211***
HISPANIC	-0.014755 -1.753*	0.01014 1.129
DROPOUT	-0.053842 -6.558***	-0.068869 -7.863***
POSTHS	0.068944 8.702***	0.054148 6.407***
SINGPNT	0.03924 1.686*	0.029024 1.169
DUALPNT	0.036836 1.55	0.03304 1.303
OTHRFAM	0.031384 1.345	0.006599 0.265
FSIZE2	-0.005626 -0.239	0.009712 0.387
FSIZE3	-0.006239 -0.261	0.013606 0.534
FSIZE4	-0.01712 -0.71	0.006262 0.244
FSIZE5	0.006308 0.264	0.017033 0.668
INAFDC	-0.018225 -2.225**	-0.038666 -4.425***
OTHASST	-0.03699 -5.222***	-0.047697 -6.312***
MBST	-0.006648 -0.445	-0.012846 -0.806
MOST	0.047327 3.319***	0.050809 3.34***
MOJT	0.017193 1.165	0.004601 0.292
MJSA	-0.065064 -3.54***	-0.027449 -1.4
PRESUM	8.869E-06 20.649***	1.0445E-05 22.797***
MINPTE	-0.032022 -1.408	-0.048251 -1.988**
SUBPTE	-0.014528 -1.353	-0.007423 -0.648
FULLTE	0.108448 11.323***	0.095354 9.333***
FAMINPOV	-0.057518 -0.52	-0.140713 -1.194
MEDRENT	0.00003742 0.32	5.1502E-05 0.413
UN91_92	-0.255164 -1.466	0.023563 0.127
WWTERM	0.000236 3.96***	0.000148 2.334***
LOWGROW	-0.007409 -0.955	-0.014093 -1.703*
HIGROW	-0.002704 -0.31	0.000956 0.103

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Table B.8
Characteristics of Texas JTPA Title II-A
Adult and Out-of-School Youth Terminees, PY 1990
Concho SDA

Characteristic	Percent
Gender	
Male	25.2%
Female	74.8%
Age Group	
18-21	43.9%
22-29	28.5%
30-39	15.5%
40-49	10.6%
50+	1.6%
Race/Ethnic	
White/Other	51.2%
Black	4.9%
Hispanic	43.9%
Education	
Less than high school	28.4%
High school/GED	64.2%
More than high school	7.3%
Family Status (Texas only)	
Single parent	39.8%
Parent in two-parent family	22.0%
Other family member	17.9%
Nondependent individual	20.3%
Persons in family	
1	17.9%
2	25.2%
3	26.8%
4	13.8%
5 or more	16.3%
Welfare Status	
AFDC recipient	19.5%
Other public assistance	62.6%

Table B.8 (cont.)

Characteristic	Percent
Major program activity	
Basic skills training	30.9%
Occupational skill training	34.2%
On the job training	21.1%
Job search assistance	3.3%
Other	10.6%
Pre-program work history	
Earnings first year prior	$ 837
Earnings second year prior	$ 750
Average quarters employed - first year	1.8
Average quarters employed - second year	1.8
Termination Status	
Not employed at termination	11.4%
Minimal employment at termination	2.4%
Substantial employment at termination	15.5%
Full-time employment at termination	68.3%
Occupation at Termination	
Management/administration	0.0%
Professional	10.4%
Sales	11.3%
Clerical	14.2%
Service	23.6%
Agriculture	0.0%
Precision production	33.0%
Operator	7.6%
Industry at Termination	
Agriculture	0.0%
Mining	0.9%
Construction	1.9%
Manufacturing	30.2%
Transportation, Electric, Gas, etc.	6.6%
Retail	21.7%
Finance, Insurance, Real Estate	1.9%
Services	32.1%
Other	4.7%
Percent of Total JTPA Title IIA	
Adult and Youth Terminees	100%
	123

Table B.9
Characteristics of Texas JTPA Title II-A
Adult and Out-of-School Youth Terminees, PY 1990
Golden Crescent SDA

Characteristic	Percent
Gender	
Male	28.5%
Female	71.5%
Age Group	
18-21	20.6%
22-29	38.0%
30-39	27.7%
40-49	12.4%
50+	1.3%
Race/Ethnic	
White/Other	40.1%
Black	12.9%
Hispanic	47.0%
Education	
Less than high school	50.1%
High school/GED	40.1%
More than high school	9.8%
Family Status (Texas only)	
Single parent	39.6%
Parent in two-parent family	24.5%
Other family member	14.8%
Nondependent individual	21.1%
Persons in family	
1	20.3%
2	15.0%
3	21.9%
4	21.6%
5 or more	21.1%
Welfare Status	
AFDC recipient	30.6%
Other public assistance	50.7%

Table B.9 (cont.)

Characteristic	Percent
Major program activity	
Basic skills training	45.4%
Occupational skill training	20.6%
On the job training	13.5%
Job search assistance	17.2%
Other	3.4%
Pre-program work history	
Earnings first year prior	$ 475
Earnings second year prior	$ 584
Average quarters employed - first year	1.6
Average quarters employed - second year	1.8
Termination Status	
Not employed at termination	40.9%
Minimal employment at termination	3.2%
Substantial employment at termination	15.8%
Full-time employment at termination	40.1%
Occupation at Termination	
Management/administration	1.3%
Professional	19.6%
Sales	12.1%
Clerical	10.7%
Service	26.3%
Agriculture	1.3%
Precision production	14.7%
Operator	13.8%
Industry at Termination	
Agriculture	1.3%
Mining	0.5%
Construction	5.8%
Manufacturing	14.7%
Transportation, Electric, Gas, etc.	0.9%
Retail	21.4%
Finance, Insurance, Real Estate	1.3%
Services	50.9%
Other	3.1%
Percent of Total JTPA Title IIA	
Adult and Youth Terminees	100%
n	379

Table B.10
Characteristics of Texas JTPA Title II-A
Adult and Out-of-School Youth Terminees, PY 1990
West Central Texas SDA

Characteristic	Percent
Gender	
Male	48.6%
Female	51.3%
Age Group	
18-21	19.6%
22-29	41.9%
30-39	29.0%
40-49	8.8%
50+	0.7%
Race/Ethnic	
White/Other	78.4%
Black	7.4%
Hispanic	14.2%
Education	
Less than high school	18.2%
High school/GED	75.0%
More than high school	6.8%
Family Status (Texas only)	
Single parent	27.0%
Parent in two-parent family	30.4%
Other family member	21.6%
Nondependent individual	20.9%
Persons in family	
1	18.2%
2	18.9%
3	22.3%
4	24.3%
5 or more	16.2%
Welfare Status	
AFDC recipient	15.5%
Other public assistance	49.3%

Table B.10 (cont.)

Characteristic	Percent
Major program activity	
Basic skills training	4.0%
Occupational skill training	75.7%
On the job training	16.2%
Job search assistance	0.0%
Other	4.1%
Pre-program work history	
Earnings first year prior	$ 1,997
Earnings second year prior	$ 2,514
Average quarters employed - first year	2.2
Average quarters employed - second year	2.3
Termination Status	
Not employed at termination	4.7%
Minimal employment at termination	0.0%
Substantial employment at termination	12.2%
Full-time employment at termination	83.1%
Occupation at Termination	
Management/administration	1.4%
Professional	29.8%
Sales	2.1%
Clerical	7.8%
Service	17.0%
Agriculture	0.0%
Precision production	20.6%
Operator	21.3%
Industry at Termination	
Agriculture	0.0%
Mining	10.6%
Construction	6.4%
Manufacturing	2.1%
Transportation, Electric, Gas, etc.	12.8%
Retail	9.2%
Finance, Insurance, Real Estate	1.4%
Services	56.0%
Other	1.4%
Percent of Total JTPA Title IIA	
Adult and Youth Terminees	100%
n	148

Table B.11
Characteristics of Texas JTPA Title II-A
Adult and Out-of-School Youth Terminees, PY 1990
Central Texas SDA

Characteristic	Percent
Gender	
Male	44.9%
Female	55.1%
Age Group	
18-21	20.4%
22-29	35.7%
30-39	34.7%
40-49	6.5%
50+	2.7%
Race/Ethnic	
White/Other	60.5%
Black	23.5%
Hispanic	16.0%
Education	
Less than high school	31.3%
High school/GED	55.1%
More than high school	13.6%
Family Status (Texas only)	
Single parent	41.5%
Parent in two-parent family	23.5%
Other family member	10.2%
Nondependent individual	24.8%
Persons in family	
1	22.5%
2	17.4%
3	24.2%
4	19.1%
5 or more	17.0%
Welfare Status	
AFDC recipient	26.2%
Other public assistance	66.0%

Table B.11 (cont.)

Characteristic	Percent
Major program activity	
Basic skills training	20.4%
Occupational skill training	36.4%
On the job training	39.5%
Job search assistance	2.4%
Other	1.4%
Pre-program work history	
Earnings first year prior	$ 1,232
Earnings second year prior	$ 790
Average quarters employed - first year	1.9
Average quarters employed - second year	1.7
Termination Status	
Not employed at termination	21.8%
Minimal employment at termination	0.3%
Substantial employment at termination	3.7%
Full-time employment at termination	74.2%
Occupation at Termination	
Management/administration	0.4%
Professional	13.9%
Sales	4.8%
Clerical	7.4%
Service	23.0%
Agriculture	0.9%
Precision production	6.1%
Operator	43.5%
Industry at Termination	
Agriculture	0.0%
Mining	6.1%
Construction	1.3%
Manufacturing	15.2%
Transportation, Electric, Gas, etc.	15.2%
Retail	11.3%
Finance, Insurance, Real Estate	1.3%
Services	40.9%
Other	8.7%
Percent of Total JTPA Title IIA	
Adult and Youth Terminees	100%
n	294

Appendix C

Family Status and Size Issues

APPENDIX C

Family Status and Size Issues

This appendix examines differences in characteristics and successful outcomes by family status for Texas PY 1990 JTPA Title IIA Adult and Out-of-School Youth terminees. It also reports on another interesting dimension of the analysis—what happens to earnings success rates when earnings are adjusted for family status and size. This analysis could only be conducted for Texas, since the Illinois JTPA program does not collect information on family status.

Characteristics by Family Status

Even a cursory examination of Texas JTPA terminee characteristics disaggregated by family status indicates that these groups are drawn from quite different populations (see Table C.1). Single parents are overwhelmingly females (96 percent) who are recipients of public assistance, fully 56 percent on AFDC and 75 percent receiving other public assistance (primarily Food Stamps).[1] Single parents also tend to be disproportionately in their 20s and 30s, Black, poorly educated—40 percent with less than a high school education—and with very low preprogram earnings.

Several characteristics appear to define parents in 2-parent families in the Texas JTPA program. They are heavily Hispanic (59 percent) and have very large families, 71 percent with four or more members. These parents also tend to be older, very poorly educated (46 percent less than high school), receiving nonAFDC public assistance (56 percent), and have more quarters of work and higher preprogram earnings. Blacks are disproportionately underrepresented in this group.

Other family members are distinctive for other reasons. They are heavily Hispanic (54 percent), living in large families (50 percent in families with four or more members) and very young: 60 percent are out-of-school youth, and another 20 percent are 22-29 years of age. Surprisingly few in this group reported being recipients of AFDC, but nearly two out of five were receiving other types of public assistance at entry. They also have low education levels and lower preprogram work and earnings, but this is not surprising given their relative youth.

Nondependent individuals are distinctively White (43 percent), male (66 percent) and better educated—only about a third have less than a high school education, while one in six has some postsecondary education. As a group, they are the least dependent on public assistance of any kind, and have relatively high preprogram work and earnings.

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[1] Note that the AFDC and the Other Public Assistance categories are not mutually exclusive since most AFDC families also receive Food Stamps.

Looking at program participation and termination status variables by family status largely confirms expectations, but also reveals some surprises. By major program activity, differences by family status are modest. However, single parents and other family members tend to have the highest shares in Basic Skills Training, while parents in 2-parent families and nondependent individuals were enrolled at higher rates in OJT.

The main difference in employment status at termination was that other family members, being relatively young and lacking pressing economic needs (such as parental responsibilities), were seldom employed fulltime at termination; in fact, they were more likely to be unemployed or employed in either parttime status than employed fulltime. Terminees who were either parents or nondependent individuals were typically employed fulltime at termination or had substantial (at least 20 hours per week) parttime jobs. A high share of single parents were unemployed at termination (23 percent).

The types of jobs held at termination appear to be driven heavily by gender and education. More than three of every five single parents, who are predominately female and poorly educated, were employed in two occupational groups, Clerical (32 percent) and Service (30 percent); they also were concentrated in only two industries—70 percent worked in either Services (51 percent) and Retail Trade (19 percent). The other family status groupings exhibited more even employment distributions by occupation and industry, although all of them had relatively high shares in Service, Operatives and Clerical occupations and in the Services, Retail and Manufacturing industries.

Continuous Employment Success, by Family Status

Continuous, strict-steady success rates for the second postprogram year, by family status, are shown in Table C.2. Second-year employment success rates for all terminees, provided at the end of this table, indicate that parents in 2-parent families have higher success rates (41 percent), while all other groups cluster around 32-33 percent. Looking across family status categories, as expected males generally have higher success rates than females, except for nondependent individuals, who are also disproportionately male. For both groups of parents, the relationship between age and employment success follows the expected pattern, with lower rates for youth and older adults and higher rates otherwise. This age/success relationship is less clear for other family members and nondependent individuals: rates for the former appear to move unpredictably by age group, while for the latter, they vary little with age.

Employment success rates for all terminees exhibited a clear pattern by race/ethnicity: rates for Whites and Hispanics were comparable and exceeded those for Blacks. Disaggregating by family status reveals more variation. The all-terminee pattern

roughly holds for all family status groupings except parents in 2-parent families, for whom White rates (45 percent) exceed those for Blacks and Hispanics (about 39 percent).

The pattern of success rates by years of education and family status is similar to that for all terminees: higher education is associated with greater success.

For all terminees, larger family sizes were associated with only slightly higher employment success rates in the second year post. This relationship appears to hold for parents in 2-parent families, but not for any of the other groups. Single parents might be expected to have more difficulty working regularly with additional family members, as dependent care becomes more of a problem. Employment success rates for public assistance recipients look much like those for all terminees by family status: those on other public assistance (e.g., Food Stamps) are higher than those on AFDC.

Employment success rates by major program activity for the four family status groupings also generally conform to the all-terminee pattern: the lowest success rates by far (21-28 percent) are for BST, the highest for OST (39-48 percent), and the others tend to fall somewhere between for all groups.

Some differences appear in the patterns for termination employment status. While for all terminees there was little difference in success rates for those who were minimally employed compared to those unemployed at termination; however, the rate of employment success increased for those with substantial employment and again for those with a fulltime job at termination. This pattern is apparent for nondependent individuals, but for others, the pattern is more varied. Generally, increases in employment success rates occur for each gain in employment status moving from unemployed to fully employed at termination. Changing from substantially to fully employed typically yields the greatest success rate gains.

As with all terminees, the type of job at termination is also important for employment success. Rates of success by occupation for these family status groupings follow the same pattern as those for all terminees. Success rates typically tend to be highest for those in Professional and Clerical jobs and lowest in Agriculture and Service employment. There is more variation at the high end for employment by industry across family status; however, the lowest continuous employment rates remain in Agriculture, Construction and Retail Trade, the more seasonal industries.

Earnings Success, by Family Status

Earnings success rates by family status for the second postprogram year are shown in Table C.3. For all terminees, only parents in 2-parent families have notably

higher success rates (32 percent), while all other groups cluster with rates in the low 20s. Many of the patterns by family status follow the all-terminee pattern.

Males, particularly those with parental responsibilities, generally have higher success rates than females; the male/female gap narrows for other family members and disappears entirely for nondependent individuals. Very few single parents are males. The youngest (18-21 years) and oldest (50+ years) terminees have the lowest success rates across all family status categories; single parents typically have the lowest rates.

The overall pattern also holds for most family status groupings in terms of race/ethnicity, with Whites and Others generally having the highest earnings success rates, followed by Hispanics and Blacks whose rates are similar. The notable exception is that for parents in 2-parent families: Blacks, while less successful than Whites, exceed Hispanics by a considerable margin.

The success rates by education also follow the all-terminee pattern, although with some interesting variations. Poorly educated single parents, who clearly have pressing earnings responsibilities, posted the lowest earnings success rates (9 percent), and unfortunately many in this group have less than a high school education. The relationship between education and earnings success might be even more apparent if literacy level were substituted for years of education completed (Segal 1995). Also, while the basic education/earnings success relationship holds for parents in 2-parent families, even those parents with less than a high school education have earnings success rates (almost 21 percent) which approach those of some of the better educated members of other family status groupings. Regardless of family status, education yields higher success rates.

Earnings success rates for family size and welfare status follow the all-terminee pattern for all family status categories, as do the rates for major program activity.

For all terminees, having less than a fulltime job at termination was little better than not having a job; only securing fulltime work led to high rates of earnings success. Patterns by family status exhibit more variation. For parents, whether single or in 2-parent families, there is a clear progression in earnings success rates moving from unemployed to parttime to fulltime employment at termination. For other family members, the rate progression is not linear: those with minimal parttime jobs actually have lower success rates than those who are unemployed at termination, though from that point, the usual increases in success rates take hold as the intensity of employment grows. Nondependent individuals appear slightly better off in terms of earnings success if they secure minimal work at termination, and with increasing work, their success rate continues to rise. The type of termination job affects earnings success rates for these family status groups just as it does for all terminees.

Adjusted Earnings Success Rates

This section reexamines earnings success rates for all terminees and the various family status subgroups once they have been adjusted for family status and size. Applying such an adjustment to the earnings success rates is more complex than it might seem at first, especially for parents and for other family members; it is straightforward for nondependent individuals. Earnings success rates for this portion of the analysis have been recomputed (Table C.4) assuming that:

- whether a single parent or a parent in a 2-parent family, the JTPA participant is their family's sole earner; and
- other family members are not their family's sole earner, but are treated as nondependent individuals.

These adjustments reduced the earnings success rates by 44-45 percent for all terminees: fewer than 13 percent succeeded in the first postprogram year, rising to only 13.5 percent in the second year. Moreover, the impacts of these family status/size adjustments were very unevenly distributed.

Women were much harder hit by the adjustment than were men. Women's earnings success rates were reduced by about half in each postprogram year, falling to only 9-10 percent, while men's rates were cut by only about a third. Nearly 71 percent of female participants in the Texas JTPA program had parental responsibilities, compared to fewer than one in three males.

The youngest and oldest terminees were affected less than were those in the 22-49 year old groups. The 30-39 year old group was most affected. More of these terminees had family responsibilities as well.

Among race/ethnic groups, Blacks and Hispanics bore the brunt of these adjustments. While White earnings rates were reduced by about 38 percent, rates for Blacks and Hispanics were cut nearly in half in each postprogram year. By the second year post, only around 11 percent of minority terminees had earnings exceeding 155 percent of poverty after adjustment for family status and size.

Less educated groups suffered most from these adjustments, having their success rates reduced by close to one-half: only 6-7 percent of terminees without a high school education succeeded by this measure, while around 26-27 percent of those with postsecondary education succeeded.

The impact of these adjustments by family status and size is relatively clear. Those with family responsibilities and especially those with larger families exhibit much lower earnings success rates as a result of these adjustments, leaving nondependent individuals as the most successful. Note that these adjustments are probably too severe

for parents in 2-parent families, in that many of these families may well have more than one earner. However, the effects on single-parent families are very real. Of those on public assistance, the greatest impacts were for AFDC recipients whose rates fell sharply, by around 70-74 percent. It was extremely rare for AFDC recipients to reach this level of economic sufficiency once earnings were adjusted for family status and size. There was little effect on preprogram quarters of employment or earnings levels.

Reductions in earnings success rates as a result of family status/size adjustments occurred across all major program activities in a relatively narrow range. The smallest success rate reductions were in the 41-42 percent range, while the largest were just under 52 percent. Success rate rankings for these activities remained essentially unchanged, with OST still at the top with an almost 20 percent earnings success rate, and BST at the bottom at less than 7 percent.

Measuring earnings success in light of these adjustments appears to accord even greater advantage to fulltime employment at termination. The impact of these adjustments on success rates is inversely proportional to the intensity of employment at termination; that is, the largest success rate reductions from these adjustments were for unemployed terminees (64-69 percent), and the smallest were for those with fulltime jobs (44 percent). Only terminees exiting with fulltime jobs experienced adjusted earnings success rates in double digits.

The family status/size adjustments to earnings also varied considerably by type of job held at termination. The occupations least affected were Professional, Precision Production and Operators, which experienced success rate reductions of 35-44 percent. Most of the other occupations listed saw reductions of around 50 percent. Sales, Service and Agriculture were left with adjusted earnings success rates in or barely above single digits. Industries least affected by the adjustments were Agriculture, Construction and Transportation, all of whose success rates fell by around 40 percent or less as a result. Finance, Insurance and Real Estate was hit hardest by the adjustments—their earnings success rate fell by 56-58 percent.

In summary, adjusting earnings to account for family status and family size has substantial effects on postprogram earnings success rates. Those with greater family responsibilities and larger family sizes—e.g., women, minorities and those with less education—face even more difficulty reaching real levels of economic self-sufficiency when such adjustments are made to the basic yardstick.

Table C.1
What Differences Were There by Family Status Among PY 1990 Texas JTPA Title II-A Adult and Out-of-School Youth Terminees?

Characteristic	Single Parent	Parent in Two-Parent Family	Other Family Member	Nondependent Individual
Gender				
Male	3.8%	49.3%	54.0%	65.9%
Female	96.2%	50.7%	46.0%	34.1%
Age Group				
18-21	22.2%	15.7%	60.1%	28.8%
22-29	36.3%	33.8%	20.3%	29.5%
30-39	31.4%	34.5%	10.2%	24.4%
40-49	8.9%	13.2%	5.6%	11.5%
50+	1.2%	2.8%	3.8%	5.9%
Race/Ethnic				
White/Other	28.0%	30.9%	23.7%	43.0%
Black	35.2%	10.4%	22.5%	23.8%
Hispanic	36.8%	58.7%	53.8%	33.3%
Education				
Less than high school	40.1%	45.6%	43.3%	33.7%
High school/GED	50.5%	45.0%	48.9%	50.3%
More than high school	9.4%	9.4%	7.8%	16.1%
Persons in family				
1	0.4%	0.5%	3.2%	92.3%
2	32.8%	1.3%	28.8%	3.6%
3	32.0%	27.1%	18.2%	1.6%
4	19.5%	30.5%	16.4%	0.9%
5 or more	15.2%	40.6%	33.3%	1.6%
Welfare Status				
AFDC recipient	56.0%	7.2%	8.8%	0.6%
Other public assistance	75.4%	55.8%	38.7%	20.3%
Major program activity				
Basic skills training	36.5%	28.1%	37.1%	29.1%
Occupational skill training	32.8%	28.9%	24.7%	25.9%
On the job training	19.2%	34.2%	29.0%	32.1%
Job search assistance	5.6%	5.0%	4.8%	4.9%
Other	5.9%	3.9%	4.5%	8.0%
Pre program history				
Earnings first year prior	$612	$1,282	$697	$1,499
Earnings second year prior	$659	$1,323	$329	$1,101
Average quarters employed - first year	1.7	1.9	1.7	2.0
Average quarters employed - second year	1.8	2.0	1.6	1.9

Table C.1 (cont.)

Characteristic	Single Parent	Parent in Two-Parent Family	Other Family Member	Nondependent Individual
Termination Status				
Not employed at termination	23.1%	19.6%	24.5%	17.6%
Minimal employment at termination	1.9%	1.4%	1.5%	1.2%
Substantial employment at termination	39.8%	30.7%	40.7%	31.7%
Full-time employment at termination	58.4%	67.9%	57.8%	67.0%
Occupation at Termination				
Management/administration	1.6%	1.3%	1.5%	1.3%
Professional	8.6%	7.6%	5.0%	6.4%
Sales	10.5%	6.9%	10.3%	7.9%
Clerical	31.6%	16.0%	19.8%	18.6%
Service	29.8%	22.0%	25.5%	24.5%
Agriculture	0.5%	2.6%	2.7%	1.6%
Precision production	3.6%	15.3%	12.5%	14.0%
Operator	13.8%	28.3%	22.8%	25.8%
Industry at Termination				
Agriculture	0.7%	1.9%	2.2%	1.4%
Mining	0.4%	0.9%	0.8%	0.8%
Construction	2.0%	8.1%	6.4%	9.1%
Manufacturing	12.0%	19.6%	16.1%	16.7%
Transportation, Electric, Gas, etc.	4.4%	5.9%	4.3%	6.1%
Retail	18.7%	15.4%	22.2%	18.0%
Finance, Insurance, Real Estate	3.7%	2.2%	1.9%	2.0%
Services	50.7%	35.5%	35.9%	37.3%
Other	7.5%	10.3%	10.2%	8.7%
Percent of Total JTPA Title II-A Adult and Out-of-School Youth Terminees	100.0%	100.0%	100.0%	100.0%
n	7,947	5,845	5,175	5,952

Table C.2
What Percent of PY 1990 Texas JTPA Title II-A Adult and Out-of-School Youth Terminees Were Continuously Employed During the Second Postprogram Year?

Characteristic	Single Parent	Parent in Two-Parent Family	Other Family Member	Nondependent Individual
Gender				
Male	38.5%	46.9%	33.0%	30.4%
Female	33.0%	35.5%	30.8%	36.5%
Age Group				
18-21	23.3%	32.2%	29.0%	30.4%
22-29	33.9%	42.5%	38.3%	34.5%
30-39	37.7%	43.0%	31.4%	32.1%
40-49	39.2%	43.7%	42.1%	33.0%
50+	36.8%	39.8%	33.5%	32.5%
Race/Ethnic				
White/Other	34.0%	45.0%	32.3%	34.7%
Black	31.9%	39.1%	24.6%	27.9%
Hispanic	34.0%	39.4%	35.0%	32.8%
Education				
Less than high school	19.9%	32.1%	22.1%	21.6%
High school/GED	41.2%	47.6%	39.0%	36.5%
More than high school	47.1%	53.9%	43.3%	42.6%
Persons in family				
1	31.3%	51.9%	30.5%	32.8%
2	33.7%	36.4%	33.8%	33.2%
3	35.0%	41.3%	29.0%	27.2%
4	31.7%	41.5%	29.8%	28.6%
5 or more	30.5%	40.8%	33.3%	21.3%
Welfare Status				
AFDC recipient	25.4%	31.9%	24.2%	23.5%
Other public assistance	29.8%	38.1%	30.8%	25.6%
Major program activity				
Basic skills training	21.4%	28.4%	23.2%	21.0%
Occupational skill training	42.2%	48.3%	38.5%	40.1%
On the job training	38.4%	44.5%	37.9%	37.6%
Job search assistance	37.6%	44.0%	34.3%	35.7%
Other	35.7%	47.1%	28.4%	26.7%
Pre-program work history				
Median earnings first year prior	$2,134	$2,924	$1,405	$3,012
Median earnings second year prior	$2,006	$2,920	$1,012	$2,602
Mean quarters employed - first year	2.1	2.2	2.0	2.3
Mean quarters employed - second year	2.2	2.3	1.9	2.7

Table C.2 (cont.)

Characteristic	Single Parent	Parent in Two-Parent Family	Other Family Member	Nondependent Individual
Termination Status				
Not employed at termination	13.8%	23.0%	18.9%	15.3%
Minimal employment at termination	26.2%	24.7%	24.4%	18.9%
Substantial employment at termination	31.3%	35.6%	28.8%	28.9%
Full-time employment at termination	41.7%	47.6%	38.7%	38.0%
Occupation at Termination				
Management/administration	44.0%	44.8%	18.0%	41.7%
Professional	58.8%	67.2%	55.2%	55.5%
Sales	34.2%	37.5%	33.9%	35.6%
Clerical	43.4%	49.6%	42.0%	45.3%
Service	32.4%	42.3%	33.8%	29.9%
Agriculture	32.3%	35.9%	20.2%	27.4%
Precision production	33.8%	46.7%	37.0%	32.1%
Operator	36.4%	42.5%	36.6%	32.8%
Industry at Termination				
Agricultural	35.0%	24.7%	18.7%	28.6%
Mining	52.2%	47.6%	34.6%	42.1%
Construction	33.3%	38.0%	28.1%	26.8%
Manufacturing	39.1%	47.4%	41.0%	38.9%
Transportation, Electric, Gas, etc.	40.0%	42.3%	35.1%	39.5%
Retail	32.8%	38.6%	33.3%	31.1%
Finance, Insurance, Real Estate	41.9%	56.0%	30.3%	43.5%
Services	41.1%	48.3%	39.2%	37.9%
Other	40.9%	52.9%	42.1%	38.5%
Total JTPA Title II-A				
Adult and Out-of-School Youth Terminees	33.2%	41.1%	32.0%	32.5%
n	2,641	2,404	1,657	1,932

Table C.3
What Percent of PY 1990 Texas JTPA Title II-A Adult and Out-of-School Terminees Had Earnings that Exceeded 155 Percent of Poverty During the Second Postprogram Year?

Characteristic	Single Parent	Parent in Two-Parent	Other Family Member	Nondependent Individual
Gender				
Male	34.8%	40.5%	22.5%	25.1%
Female	21.5%	23.8%	18.2%	25.5%
Age Group				
18-21	12.8%	21.3%	16.4%	21.4%
22-29	22.8%	33.6%	27.1%	26.7%
30-39	26.2%	34.6%	26.2%	27.4%
40-49	27.3%	34.8%	29.0%	26.8%
50+	20.0%	28.0%	22.3%	24.2%
Race/Ethnic				
White/Other	28.1%	40.3%	25.9%	29.6%
Black	19.7%	32.5%	17.5%	20.7%
Hispanic	19.7%	27.6%	19.4%	22.8%
Education				
Less than high school	9.2%	20.7%	12.2%	14.7%
High school/GED	28.9%	39.8%	25.7%	28.0%
More than high school	39.8%	49.4%	34.3%	38.7%
Persons in family				
1	31.3%	48.1%	19.2%	25.6%
2	22.6%	31.2%	24.0%	24.3%
3	23.9%	30.8%	19.2%	17.4%
4	20.1%	34.0%	19.1%	17.9%
5 or more	18.9%	31.2%	19.1%	16.0%
Welfare Status				
AFDC recipient	14.0%	20.0%	14.1%	11.8%
Other public assistance	18.4%	27.3%	16.5%	17.8%
Major program activity				
Basic skills training	10.5%	18.7%	12.4%	13.0%
Occupational skill training	33.0%	41.6%	29.9%	34.7%
On the job training	24.7%	34.0%	23.8%	29.9%
Job search assistance	24.3%	32.6%	18.5%	24.5%
Other	21.7%	38.8%	16.4%	20.6%
Pre-program history				
Earnings first year prior	$2,693	$3,702	$2,006	$3,311
Earnings second year prior	$2,898	$4,132	$1,426	$3,128
Average quarters enrolled - first year	2.2	2.3	2.1	2.3
Average quarters enrolled - second year	2.4	2.4	2.0	2.3

Table C.3 (cont.)

Characteristic	Single Parent	Parent in Two-Parent	Other Family Member	Nondependent Individual
Termination Status				
Not employed at termination	6.4%	14.1%	10.1%	9.6%
Minimal part-time employment at termination	12.1%	19.8%	6.4%	12.2%
Substantial part-time employment at termination	15.3%	23.4%	13.7%	14.8%
Full-time employment at termination	30.5%	38.8%	27.2%	31.8%
Occupation at Termination				
Management/administration	30.8%	37.9%	10.0%	36.7%
Professional	55.2%	64.5%	48.3%	55.5%
Sales	14.5%	21.2%	13.7%	19.0%
Clerical	33.3%	37.4%	31.8%	33.3%
Service	15.9%	27.8%	18.1%	18.8%
Agriculture	19.4%	22.2%	9.6%	15.1%
Precision production	27.9%	40.9%	27.5%	31.8%
Operator	24.4%	36.8%	26.1%	29.4%
Industry at Termination				
Agriculture	17.5%	23.5%	12.0%	27.0%
Mining	60.9%	47.6%	23.1%	39.5%
Construction	29.8%	36.9%	24.9%	30.4%
Manufacturing	27.8%	39.6%	29.7%	34.1%
Transportation, Electric, Gas, etc.	30.0%	37.4%	23.6%	33.9%
Retail	15.4%	24.6%	15.1%	17.1%
Finance, Insurance, Real Estate	34.4%	39.0%	19.7%	37.0%
Services	28.3%	38.6%	27.9%	29.4%
Other	31.5%	38.7%	28.5%	29.9%
Total JTPA Title II-A				
Adult and Out-of-School Youth Terminees	22.0%	32.0%	20.5%	25.2%
n	1,751	1,871	1,062	1,501

Table C.4
What Percent of PY 1990 Texas JTPA Title II-A Adult and Out-of-School Terminees Had Earnings that Exceeded 155 Percent of Poverty (As Adjusted for Family Status and Size) During the First and Second Postprogram Years?

Characteristic	Post-Program Year First	Second
Gender		
Male	17.8%	19.0%
Female	8.6%	9.9%
Age Group		
18-21	10.5%	12.5%
22-29	12.4%	16.4%
30-39	12.6%	12.9%
40-49	14.8%	15.4%
50+	17.7%	18.2%
Race/Ethnic		
White/Other	18.6%	19.4%
Black	9.3%	11.2%
Hispanic	9.4%	10.7%
Education		
Less than high school	5.5%	6.6%
High school/GED	14.8%	16.5%
More than high school	26.2%	26.5%
Family Status (Texas Only)		
Single parent	5.5%	6.8%
Parent in two-parent family	4.8%	6.7%
Other family member	18.1%	19.7%
Nondependent individual	23.6%	23.8%
Persons in family		
1	24.8%	24.8%
2	14.1%	15.6%
3	8.8%	10.9%
4	5.4%	7.4%
5 or more	6.2%	7.2%
Welfare Status		
AFDC recipient	3.2%	4.2%
Other public assistance	6.3%	7.7%
Major program activity		
Basic skills training	5.2%	6.5%
Occupational skill training	17.4%	19.7%
On the job training	15.9%	15.8%
Job search assistance	9.7%	12.2%
Other	12.3%	13.0%

Table C.4 (cont.)

Characteristic	Post-Program Year First	Second
Pre-program work history		
Earnings first year prior	$ 3,107	$ 2,933
Earnings second year prior	$ 2,815	$ 2,670
Average quarters employed - first year	2.3	2.3
Average quarters employed - second year	2.3	2.3
Termination Status		
Not employed at termination	3.1%	4.8%
Minimal employment at termination	3.9%	5.2%
Substantial employment at termination	5.8%	8.1%
Fulltime employment at termination	17.1%	17.9%
Occupation at Termination		
Management/administration	16.2%	15.1%
Professional	34.7%	36.4%
Sales	6.5%	8.4%
Clerical	14.3%	15.9%
Service	8.4%	10.0%
Agriculture	6.7%	6.7%
Precision production	20.3%	20.9%
Operator	17.1%	16.7%
Industry at Termination		
Agriculture	11.0%	11.8%
Mining	20.2%	20.2%
Construction	21.6%	19.4%
Manufacturing	18.6%	18.4%
Transportation, Electric, Gas, etc.	19.0%	19.5%
Retail	7.0%	8.8%
Finance, Insurance, Real Estate	14.0%	15.0%
Services	14.9%	16.6%
Other	16.5%	16.9%
Total JTPA Title II-A		
Adult and Out-of-School Youth Terminees	12.3%	13.5%
n	3,059	3,368

Bibliography

Andrade, Sally J. et al. 1992. *Texas Quality Work Force Planning for the 21st Century: A Renewed Challenge for Education and Training Providers, Business, Industry and Labor.* Austin, TX: Texas Education Agency. December.

Ashenfelter, Orley. 1978. "Estimating the Effects of Training Programs on Earnings," *Review of Economics and Statistics.* February.

Barnow, Burt S. 1992. "The Effects of Performance Standards on State and Local Programs." In Manski, Charles F.; and Garfinkel, Irwin, Editors. *Evaluating Welfare and Training Programs.* Cambridge, MA: Harvard University Press.

_____. 1987. "The Impact of CETA Programs on Earnings: A Review of the Literature." *Journal of Human Resources.* Vol. XXII. Spring.

Bassi, Laurie J. 1984. "The Effect of CETA on the Postprogram Earnings of Participants," *Journal of Human Resources.* November.

Bloom, Howard S. et al. 1993. *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months.* Bethesda, MD: Abt Associates, Inc. January.

Bowman, William R. 1993. *Evaluating JTPA Programs for Economically Disadvantaged Adults: A Case Study of Utah and General Findings.* Washington, D.C.: National Commission for Employment Policy Research Report 92-02. June.

Burghardt, John; and Gordon, Anne. 1990. *More Jobs and Higher Pay: How an Integrated Program Compares with Traditional Programs.* New York: The Rockefeller Foundation. March.

Burtless, Gary. 1995. "The Case for Randomized Field Trials in Economic and Policy Research." *Journal of Economic Perspectives.* Vol. 9, No. 2. Spring.

Center for the Study of Human Resources. 1993. "Economic Self-sufficiency for AFDC Families." Austin, TX: LBJ School, The University of Texas. May.

Chicago Urban League; Latino Institute; and Northern Illinois University. 1993. "Making Work Pay: State and Local Responses to the Problems of the Working Poor." Policy Issues for Panel Discussion, Prepared for the Working Poor Policy Forum. December.

_____. 1993. "Working Poor Families in Chicago and the Chicago Metropolitan Area: A Statistical Profile Based on the 1990 Census." Prepared for the Working Poor Policy Forum. December.

Commission on the Skills of the American Workforce. 1990. *America's Choice: high skills or low wages?* Rochester, NY: National Center on Education and the Economy.

Couch, Kenneth. 1992. "New Evidence on the Long-term Effects of Employment Training Programs." *Journal of Labor Economics.* Vol. 10, no. 4. Pp. 380-388.

Ellwood, David T. 1988. *Poor Support: Poverty in the American Family.* New York: Basic Books, Inc.

Friedlander, Daniel. 1988. *Subgroup Impacts and Performance Indicators for Selected Welfare Employment Programs.* New York: Manpower Demonstration Research Corporation. August.

Geraci, Vincent J. 1984. "Short-Term Indicators of Job Training Program Effects on Long-Term Participant Earnings." Austin: Center for Economic Research, The University of Texas. Project Working Paper No. 2. August

_____; and King, Christopher T. 1981. "Employment and Training (CETA) Program Performance: Long-Term Earnings Effects and Short Term Indicators." Austin: The University of Texas, Center for the Study of Human Resources, Working Paper Series No. 40-81.

Gueron, Judith M.; and Pauly, Edward. 1991. *From Welfare to Work.* New York: Russell Sage Foundation.

Hanna, James; and Turney, Zina. 1988. *The Net Impact of the Nevada JTPA Title II Program.* Carson City: Nevada Employment Security Department. February.

Heckman, James J. 1994. "Is Job Training Oversold?" *Public Interest.* Spring.

_____; and Hotz, V. Joseph. 1989. "Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training" *Journal of the American Statistical Association.* 84(408), pp. 862-874.

_____; and Smith, Jeffrey A. 1995. "Assessing the Case for Social Experiments." *Journal of Economic Perspectives.* Vol. 9, No. 2. Spring.

Hotz, V. Joseph. 1992. "Designing an Evaluation of the Job Training Partnership Act." Chapter 2 in Manski, Charles F.; and Garfinkel, Irwin, Editors. *Evaluating Welfare and Training Programs.* Boston: Harvard University Press.

King, Christopher T. 1988. *Cross-Cutting Performance Management Issues in Human Resource Programs.* Washington, D.C.: National Commission for Employment Policy Research Report 88-12. August.

_____; et al. 1994. *Texas JOBS Program Evaluation: Final Report.* Austin: The University of Texas. March.

LaLonde, Robert J. 1995. "The Promise of Public Sector-Sponsored Training Programs" *Journal of Economic Perspectives.* Vol. 9, no. 2. Spring. Pp. 149-168.

Levitan, Sar A.; and Shapiro, Irving. 1987. *Working But Poor.* Baltimore: The Johns Hopkins University Press.

Levy, Frank. 1987. *Dollars and Dreams: The Changing American Income Distribution.* New York: Russell Sage Foundation.

McKee, William L.; and Nancy L. Harrell. 1989. *Targeting Your Labor Market: Using Labor Market Information in Regional Planning for Texas Jobs.* Austin: Texas State Occupational Information Coordinating Committee.

National Commission for Employment Policy. 1991. *A Feasibility Study of the Use of Unemployment Insurance Wage-Record Data as an Evaluation Tool for JTPA: Report on Project's Phase I Activities.* Washington, D.C.: National Commission for Employment Policy Research Report 90-02. January.

_____. 1992. *Using Unemployment Insurance Wage-Record Data for JTPA Performance Management.* Washington, D.C.: National Commission for Employment Policy Research Report 91-07. June.

Reed, David. 1986. *The Return on Investment from Indiana's Training Programs Funded Through the Job Training Partnership Act.* Indianapolis: Indiana Office of Occupational Development. October.

Reich, Robert. 1992. *The Work of Nations.* Boston: Harvard University Press.

Romero, Carol J. 1994. *JTPA Programs and Adult Women on Welfare: Using Training to Raise AFDC Recipients Above Poverty.* Washington, D.C.: National Commission for Employment Policy Research Report No. 93-01. June.

Schexnayder, Deanna T.; King, Christopher T.; and Lawson, Leslie O. 1994. *Patterns of Hispanic Participation in Texas AFDC and JTPA Programs.* Austin: The University of Texas. Prepared for the National Commission for Employment Policy.

_____; and Olson, Jerome A. 1995. *Texas JOBS Program Evaluation: Second-Year Impacts.* Austin: The University of Texas. March.

Schwarz, John E.; and Volgy, Thomas J. 1992. *The Forgotten Americans.* New York: W. W. Norton and Company.

Segal, Michelle Lynn. 1995. *An Analysis of Ethnic Differences in Stated and Functional Educatonal Levels Among Individuals in the AFDC Population in Houston.* Austin: Masters Thesis, Graduate School of The University of Texas. May.

Sheets, Robert G.; Baj, John; and Harned, Catherine. *An Assessment of Service and Outcome Differences Among JTPA Participants in Illinois: Final Report.* Dekalb, IL: Northern Illinois University, Center for Governmental Studies. December.

SRI; and Berkeley Planning Associates. 1988. *JTPA Performance Standards: Effects on Clients, Services and Costs.* Washington, D.C.: National Commission for Employment Policy. Research Report No. 88-16. September.

Texas Education Agency. 1994. *Texas Quality Work Force Planning 1992-94: Results from the Field.* Austin, TX: Division of Career and Technology Education, Quality Work Force Planning Unit. November.

Trott, Charles E.; and Baj, John; with Shankman, Kathleen. 1993. *An Analysis of Repeating in JTPA in Illinois.* Dekalb, IL: Center for Governmental Studies, Northern Illinois University. August

Trott, Charles E.; Baj, John; Fahey, Sean; and Sheets, Robert. 1987. *Development of JTPA Title IIA Performance Standards Models for the States of Region V.* Dekalb, IL: Center for Governmental Studies, Northern Illinois University.

[U. S. Department of Labor.] 1994. *Guide to JTPA Performance Standards for Program Years 1994 and 1995.* Washington, D.C.: U.S. Department of Labor, Employment and Training Administration. July 29.

[_____.] JTPA Advisory Committee. *Working Capital: JTPA Investments for the 90s.* Washington, D.C.: U.S. Department of Labor. March.

U. S. General Accounting Office. 1989. *Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs.* Washington, D.C.: Human Resources Division. June.

_____. 1993. *Tax Policy—Earned Income Tax Credit: Design and Administration Could Be Improved.* Washington, D.C. USGAO. September.

Zornitsky, Jeffrey J.; et al. 1985. *Post-Program Performance Measures for Adult Programs Funded Under Titles IIA and III of JTPA: Early Findings Prepared for the U.S. Department of Labor's Performance Standards Advisory Committee.* Cambridge, MA: Prepared by Abt Associates, Inc. June.